

DOCUMENTS DEPARTMENT

CLOSED
STACKS



GOVERNMENT INFORMATION CENTER
SAN FRANCISCO PUBLIC LIBRARY

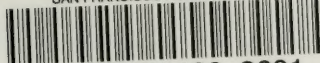
SAN FRANCISCO
PUBLIC LIBRARY

REFERENCE
BOOK

Not to be taken from the Library

SEP 20 1991

SAN FRANCISCO PUBLIC LIBRARY



3 1223 90188 9601

Digitized by the Internet Archive
in 2010 with funding from
San Francisco Public Library

APPENDIX TO THE JOURNALS

OF THE

SENATE AND ASSEMBLY

OF THE

TWENTY-EIGHTH SESSION

OF THE

LEGISLATURE OF THE STATE OF CALIFORNIA.

Volume VII.



SACRAMENTO:

STATE OFFICE, : : : J. D. YOUNG, SUPT. STATE PRINTING.

1889.

328.794 L12:28²

46559

CONTENTS.

- 1—Report of the Boards of Trustees of the State Normal Schools, 1887-1888.
- 2—Testimony taken before Special Committees from Senate and Assembly, relative to charges in connection with the erection of the Branch State Normal School, Chico, Butte County.
- 3—Reports of Examinations of Waters and Water Supply, 1886-1889, by the University of California.
- 4—Twenty-first Annual Report of the Insurance Commissioner.
- 5—Transactions of the California State Agricultural Society for 1888.

REPORT

OF THE

Boards of Trustees of the State Normal Schools

FOR THE

Years ending June 30, 1887, and June 30, 1888.



SACRAMENTO:

STATE OFFICE, : : : : J. D. YOUNG, SUPT. STATE PRINTING.
1888.

REPORT OF THE TRUSTEES OF THE STATE NORMAL SCHOOLS.

To his Excellency R. W. WATERMAN:

SIR: We have the honor to submit the following report of our transactions as a Board of Trustees of the Normal Schools at San José and Los Angeles, for the thirty-eighth fiscal year, and of other matters pertaining to the schools. The financial report covers all expenditures from July 1, 1886, to June 30, 1887. These expenditures are given in detail. For each amount paid, there is a properly allowed bill, and with the exception of six claims yet pending before the State Board of Examiners, there is for each, on file in the office of the Board of Trustees, a receipted voucher.

Assuming, as we must, that the claims alluded to will be allowed and paid, there will be returned to the State for the thirty-eighth fiscal year, the following sums:

From the appropriation for the support of the State Normal School at San José.	\$1,677 82
From the appropriation for the support of the Branch Normal School at Los Angeles	1,602 89
From the appropriation for the Library of the Branch Normal School at Los Angeles	6 42
From the appropriation for additional furniture for the Branch Normal School at Los Angeles	12 48
From the appropriation for payment of gardener for the Branch Normal School at Los Angeles	19 20
Total amount.....	\$3,318 81

This amount, and the amount of the pending bills, stands to the credit of the schools, on the books of the State Controller.

From the amount collected for tuition in the Training Department, from which mainly the grounds are kept in order, we have also, with the Treasurer of the Board, the sum of \$2,633 35.

For a statement of the scholastic work of the schools, we beg to refer you to the reports of the Principals of the schools, herewith transmitted.

We have the honor to be, very respectfully, your obedient servants,

RALPH LOWE,
President of Board of Trustees.

C. H. ALLEN, Secretary.

SAN JOSÉ, December 21, 1887.

FINANCIAL REPORT

Of State Normal School, San José, for the Thirty-eighth Fiscal Year, ending June 30, 1887.

Date of Auditing.	No. of Voucher.		Dr.	Cr.
1886.		<i>General Fund.</i>		
		Balance of appropriation from thirty-seventh fiscal year, as per last report	\$2,969 53	
		Appropriation for thirty-eighth fiscal year.....	38,000 00	
		Balance of tuition fund from thirty-seventh fiscal year, as per last report	4,385 10	
		Tuition collected for thirty-eighth fiscal year.....	3,845 50	
		Library receipts, piano rent, etc.....	164 95	
July 15.		Paid for salaries for July, 1886.....		\$2,552 25
July 15.	T. 1	Paid for payroll on grounds, July, 1886		220 00
July 15.	T. 2	Paid D. J. Hobson, services as watchman		10 00
Aug. 26.		Paid for salaries for August, 1886.....		2,702 05
Aug. 26.	1	Paid Sterling Furniture Company, desks.....		199 00
Aug. 26.	2	Paid T. K. Black & Co., janitor, tools and supplies		56 95
Aug. 26.	3	Paid E. H. Guppy & Son, stationery and models		104 07
Aug. 26.	4	Paid Henry D. Noyes & Co., periodicals.....		43 25
Aug. 26.	5	Paid Bartling & Phillips, bookbinding.....		36 45
Aug. 26.	6	Paid C. H. Allen, material for slating.....		27 50
Aug. 26.	7	Paid C. F. Willey, slating boards.....		17 75
Aug. 26.	8	Paid Geo. B. McKee & Co., slating.....		5 50
Aug. 26.	9	Paid McNeil Bros., circulars.....		6 50
Aug. 26.	10	Paid L. Aubert, cleaning carpets.....		18 40
Aug. 26.	11	Paid Daunes & Van Doren, coal, etc.....		9 35
Aug. 26.	T. 3	Paid for payroll on grounds, August, 1886		316 90
Aug. 26.	T. 4	Paid Daunes & Van Doren, coal.....		94 90
Aug. 26.	T. 5-6	Paid C. H. Allen, wood for engine.....		118 00
Aug. 26.	T. 7	Paid for decorations for building, Grand Army celebration		50 00
Aug. 26.	T. 8	Paid Mercury and Herald, advertising.....		14 35
Aug. 26.	T. 9	Paid S. C. V. M. & L. Co., lumber.....		13 43
Aug. 26.	T. 10	Paid John Stock Sons, hose connections.....		12 00
Aug. 26.	T. 11	Paid Peter Henderson, seeds.....		3 15
Aug. 26.	T. 12	Paid Charles Oeckel, hay.....		19 15
Aug. 26.	T. 13	Paid Farmers' Union, oil.....		2 50
Sept. 23.		Paid for salaries for September, 1886.....		2,702 05
Sept. 23.	12	Paid J. W. Cook, toweling.....		6 75
Sept. 23.	13	Paid Davis & Co., hardware.....		7 40
Sept. 23.	14	Paid Farmers Union, hardware.....		6 55
Sept. 23.	15	Paid John Stock Sons, pails.....		3 30
Sept. 23.	16	Paid Gilbert & Moore, desks.....		125 70
Sept. 23.	17	Paid C. H. Allen, freight on desks.....		17 95
Sept. 23.	18	Paid T. Soper, tables.....		41 00
Sept. 23.	T. 14	Paid J. A. Belloli, supplies for grounds.....		10 84
Sept. 23.	T. 15	Paid Farmers Union, belting.....		3 04
Sept. 23.	T. 16	Paid Davis & Co., tools.....		2 95
Sept. 23.	T. 17	Paid Bank of San José, discount.....		10 48
Sept. 23.	T. 18	Paid for payroll on grounds, September, 1886.....		230 00
Sept. 23.	T. 19	Paid Ed. Wale, water cart.....		15 00
Oct. 15.		Paid for salaries for October, 1886.....		2,702 05
Oct. 15.	19	Paid State of California, text-books.....		67 50
Oct. 15.	20	Paid Boston School Supply Co., maps.....		39 75
Oct. 15.	21	Paid E. H. Guppy & Son, books.....		2 10
Oct. 15.	22	Paid T. Soper, carpenter work.....		29 25
Oct. 15.	23	Paid Home for Adult Blind, brooms.....		5 80
Oct. 15.	T. 20	Paid for payroll on grounds, October, 1886.....		183 50
Oct. 15.	T. 21	Paid Charles Bernhardt, wood.....		28 00
Oct. 15.	T. 22	Paid David Walsh, blacksmithing.....		21 50
Oct. 15.	T. 23	Paid Hawley Bros. & Co., lawn mower knives.....		8 90
Oct. 15.	T. 24	Paid Bank of San José, discount.....		3 10
Nov. 18.		Paid for salaries for November, 1886.....		2,702 05
Nov. 18.	24	Paid John S. Fox, map holders.....		22 00
Nov. 18.	25	Paid E. J. Gillespie, drawing paper, etc.....		6 25
Nov. 18.	26	Paid Farmers Union, tools.....		18 60
Nov. 18.	27	Paid Milton Campbell, tinware.....		3 75
Nov. 18.	28	Paid O. A. Hale, velvetine for cases.....		6 20

FINANCIAL REPORT—Continued.

Date of Auditing.	No. of Voucher.		Dr.	Cr.
Nov. 18..	29	Paid Loeb & Etchebarne, velvetine for cases.....		\$5 10
Nov. 18..	30	Paid S. H. Wagener, chemicals.....		19 42
Nov. 18..	T. 25	Paid for payroll on grounds, November, 1886.....		182 50
Nov. 18..	T. 26	Paid V. Pachaud, plowing and hauling.....		196 87
Nov. 18..	T. 27	Paid for labor hauling manure.....		3 75
Nov. 18..	T. 28	Paid Milton Campbell, repairs and supplies.....		6 60
Nov. 18..	T. 29	Paid Ed. Wale, cart.....		55 00
Dec. 15..	-----	Paid for salaries for December, 1886.....		2,702 05
Dec. 15..	31	Paid E. H. Guppy & Son, stationery.....		142 92
Dec. 15..	32	Paid H. W. A. Nahl, diplomas.....		30 00
Dec. 15..	33	Paid Geo. W. Welch, map.....		5 00
Dec. 15..	34	Paid S. H. Wagener, chemicals and supplies.....		11 47
Dec. 15..	35	Paid S. C. V. M. & L. Co., lumber and mill work.....		15 00
Dec. 15..	36	Paid J. C. Corcoran, plumbing.....		14 35
Dec. 15..	37	Paid Geo. B. McKee & Co., glazing and slating.....		8 50
Dec. 15..	38	Paid Farmers Union, lanterns.....		2 00
Dec. 15..	39	Paid C. Sproat, repairs to battery.....		4 75
Dec. 15..	40	Paid R. Royce, Librarian, postage, express, etc.....		38 80
Dec. 15..	41	Paid Mrs. A. E. Bush, museum expenses.....		17 20
Dec. 15..	42	Paid Mrs. A. E. Bush, traveling expenses, collecting for museum.....		20 00
Dec. 15..	43	Paid J. W. Jameson, janitor supplies.....		4 05
Dec. 15..	44	Paid Daunes & Van Doren, coal.....		672 34
Dec. 15..	-----	Paid Fannie M. Estabrook, extra services during fall term.....		100 00
Dec. 15..	T. 30	Paid for payroll on grounds, December, 1886.....		182 50
Dec. 15..	T. 31	Paid J. C. Corcoran, pipes, laying same, etc.....		671 51
Dec. 15..	T. 32	Paid R. Royce, Librarian, books and papers.....		4 25
Dec. 15..	T. 33	Paid Bank of San José, discount.....		2 52
Dec. 15..	T. 34	Paid Daunes & Van Doren, coal.....		65 30
Dec. 15..	T. 35	Paid S. C. V. M. & L. Co., lumber.....		14 90
Dec. 15..	T. 36	Paid J. C. Belloli, supplies for grounds.....		100 47
Dec. 15..	T. 37	Paid Geo. F. Wells, piano.....		340 00
1887.				
Jan. 20..	-----	Paid for salaries for January, 1887.....		2,722 05
Jan. 20..	45	Paid San José Gas Company, gas six months, to December 31, 1886.....		51 95
Jan. 20..	46	Paid Sunset Telephone Company, box rent six months, to December 31, 1886.....		15 00
Jan. 20..	47	Paid C. H. Allen, commencement expenses, December, 1886.....		50 70
Jan. 20..	48	Paid F. Goldstein, filling diplomas.....		25 00
Jan. 20..	49	Paid J. W. Jameson, feather dusters.....		15 00
Jan. 20..	50	Paid John Stock Sons, janitor supplies.....		4 80
Jan. 20..	51	Paid T. Soper, carpenter work.....		9 25
Jan. 20..	52	Paid C. L. Morris, stuffed bird for museum.....		5 00
Jan. 20..	53	Paid F. Kuchenbeiser, repairs to desks.....		7 00
Jan. 20..	54	Paid State of California, text-books.....		24 80
Jan. 20..	T. 38	Paid for payroll on grounds, January, 1887.....		185 00
Jan. 20..	T. 39	Paid Guy Douglas, hauling rock and sand.....		7 25
Jan. 20..	T. 40	Paid Milton Campbell, repairing tanks.....		38 98
Jan. 20..	T. 41	Paid Charles Oeckel, hay.....		20 22
Jan. 20..	T. 42	Paid Farmers Union, oil for engine.....		7 50
Jan. 20..	T. 43	Paid L. Callisch, gopher poison.....		5 75
Jan. 20..	T. 44	Paid F. Kuchenbeiser & Son, repairing tools.....		10 30
Jan. 20..	T. 45	Paid Bank of San José, discount.....		5 58
Feb. 17..	-----	Paid for salaries for February, 1887.....		2,862 05
Feb. 17..	55	Paid S. J. Furniture Co., library cases and tables.....		105 50
Feb. 17..	56	Paid T. Soper, fitting up classroom and making tables.....		108 38
Feb. 17..	57	Paid T. Soper, carpenter work.....		13 00
Feb. 17..	58	Paid C. H. Allen, slating.....		15 00
Feb. 17..	59	Paid L. M. McKenney & Co., Directory.....		4 00
Feb. 17..	60	Paid A. R. Denike, tuning and repairing pianos.....		7 00
Feb. 17..	61	Paid David Walsh, blacksmithing.....		5 75
Feb. 17..	62	Paid Ed. Wale, wood.....		5 50
Feb. 17..	T. 46	Paid for payroll on grounds, February, 1887.....		180 00
Feb. 17..	T. 47	Paid V. Pachaud, plowing and sand.....		25 50

REPORT OF TRUSTEES OF STATE NORMAL SCHOOLS.

FINANCIAL REPORT—Continued.

Date of Auditing.	No. of Voucher.		Dr.	Cr.
Feb. 17..	T. 48	Paid Charles Bernhardt, fertilizer		\$14 25
Feb. 17..	T. 49	Paid S. C. V. M. & L. Co., skylights		48 00
Feb. 17..	T. 50	Paid David Walsh, blacksmithing		5 50
Feb. 17..	T. 51	Paid Mercury and Herald, advertising		5 50
Mar. 17..		Paid for salaries for March, 1887		2,792 05
Mar. 17..	63	Paid E. H. Guppy & Son, stationery		88 74
Mar. 17..	64	Paid E. H. Guppy & Son, dictionaries		84 00
Mar. 17..	65	Paid McNeil Bros., bookbinding		24 10
Mar. 17..	66	Paid McNeil Bros., printing		3 75
Mar. 17..	67	Paid A. Waldteufel, Vol. 21, Encyclopædia Britanica		10 50
Mar. 17..	68	Paid Rand, McNally & Co., maps		30 90
Mar. 17..	69	Paid A. Friant & Co., manila paper		3 50
Mar. 17..	70	Paid J. P. Jarman, painting and slating		43 50
Mar. 17..	71	Paid E. T. Barnes, table		12 50
Mar. 17..	72	Paid H. Rosekranz, catches for cases		6 75
Mar. 17..	73	Paid Davis & Co., tools		10 00
Mar. 17..	74	Paid S. H. Wagener, drugs, etc.		4 55
Mar. 17..	75	Paid Gillespie, Saph, & Mabury, wood		5 00
Mar. 17..	76	Paid Frank E. Smith, cleaning and repairing clocks		5 00
Mar. 17..	77	Paid R. Royce, Librarian, postage, express, etc.		36 45
Mar. 17..	78	Paid Mrs. A. E. Bush, postage, express, etc., for museum		17 95
Mar. 17..	T. 52	Paid for payroll on grounds, March, 1887		180 00
Mar. 17..	T. 53	Paid R. D. Fox, trees		13 50
Mar. 17..	T. 54	Paid C. H. Allen, seeds, etc., for grounds		12 00
Mar. 17..	T. 55	Paid J. Boschken, tools and hardware		15 40
Mar. 17..	T. 56	Paid Milton Campbell, hardware and repairs		4 48
Mar. 17..	T. 57	Paid Davis & Co., hardware		8 60
Mar. 17..	T. 58	Paid F. Schilling, locksmithing		3 00
Mar. 17..	T. 59	Paid John B. Alden, books for library		37 50
Mar. 17..	T. 60	Paid R. Royce, library expenses		7 10
April 14..		Paid for salaries for April, 1887		2,792 05
April 14..	79	Paid San José Furniture Co., tables and step-ladder		71 00
April 14..	80	Paid T. Soper, carpenter work		37 05
April 14..	81	Paid S. H. Wagener, chemicals		17 41
April 14..	82	Paid Farmers Union, hardware		2 60
April 14..	T. 61	Paid for payroll on grounds, April, 1887		246 25
April 14..	T. 62	Paid Luther & Schroeder, hose		126 00
April 14..	T. 63	Paid Farmers Union, hose and hardware		84 10
April 14..	T. 64	Paid John Rock, trees		53 90
April 14..	T. 65	Paid S. C. V. M. & L. Co., lumber		20 42
May 12..	T. 66	Paid sundry persons, loam for grounds		84 75
May 12..	T. 67	Paid F. Altman, repairs to engine		18 00
May 12..	T. 68	Paid J. A. Belloli, supplies for grounds		13 94
May 12..	T. 69	Paid J. W. Jameson, hay		9 00
May 12..	T. 70	Paid Farmers Union, supplies		3 00
May 25..		Paid for salaries for May, 1887		2,792 05
May 25..	*83	Paid G. W. Welch, books		57 98
May 25..	*84	Paid History Co., 4 vols. Bancroft's History		22 00
May 25..	85	Paid L. P. McCarty, Statistician for 1887		4 00
May 25..	86	Paid H. W. A. Nahl, diplomas		41 25
May 25..	87	Paid F. Kuchenbeiser & Son, blacksmithing		20 65
May 25..	88	Paid Sunset Telephone Co., repairs to electrical apparatus		6 00
May 25..	89	Paid J. W. Jameson, curtains and clothes hooks		6 00
May 25..	90	Paid J. W. Jameson, sawdust		3 50
May 25..	91	Paid S. H. Wagener, chemicals		17 81
May 25..	92	Paid California Distilling Co., alcohol		31 25
May 25..	93	Paid L. Chaize, brass head for cask		10 00
May 25..	94	Paid M. E. Nichols, collection birds for museum		30 00
May 25..	95	Paid Mrs. A. E. Bush, collection of shells		25 00
May 25..	96	Paid T. K. Black & Co., janitor supplies		8 25
May 25..	97	Paid John Stock Sons, coal screen and grate		12 75
May 25..	T. 71	Paid for payroll on grounds, May, 1887		208 00
May 25..	T. 72	Paid John Stock Sons, sprinklers, etc.		29 00
May 25..	T. 73	Paid Bank of San José, discount on warrants		11 00

FINANCIAL REPORT—Continued.

Date of Auditing.	No. of Voucher.		Dr.	Cr.
May 25..	T. 74	Paid J. W. Jameson, hay		\$9 00
May 25..	T. 75	Paid C. H. Allen, wood for engine		40 00
June 24..		Paid for salaries for June, 1887		2,652 50
June 24..	98	Paid E. H. Guppy & Son, stationery		41 60
June 24..	99	Paid J. C. Corcoran, plumbing repairs		104 55
June 24..	100	Paid T. K. Black, janitor supplies		28 28
June 24..	101	Paid C. H. Allen, commencement expenses		41 85
June 24..	102	Paid R. Royce, Librarian, miscellaneous expenses		75 15
June 24..	103	Paid Mrs. A. E. Bush, Curator, museum expenses		15 15
June 24..	104	Paid T. Soper, carpenter work		3 15
June 24..	105	Paid the J. Dewing Co., apparatus		299 05
June 24..	106	Paid the J. Dewing Co., books		6 80
June 24..	107	Paid Jas. W. Queen & Co., apparatus		203 25
June 24..	108	Paid Battle Creek Mach'y Co., turning lathes, etc.		109 88
June 24..	109	Paid John Taylor & Co., chemical apparatus		22 62
June 24..	110	Paid C. T. Ryland, case of birds		125 00
June 24..	111	Paid Van Horn, Mather & Frost, anatomical chart		35 00
June 24..	112	Paid D. Appleton & Co., charts, etc.		17 90
June 24..	113	Paid Rucker Bros., carpet for office		96 55
June 24..	114	Paid California Wireworks, wire guard for stage		23 10
June 24..	115	Paid T. Hermann & Co., specimens for museum		7 00
June 24..	116	Paid T. Soper, cases		75 00
June 24..	T. 76	Paid for extra labor on grounds		95 70
June 24..	T. 77	Paid for payroll on grounds, June, 1887		231 25
June 24..	T. 78	Paid J. C. Corcoran, laying pipe, etc.		98 02
June 24..	T. 79	Paid Clayton Jones, wood		96 00
June 24..	T. 80	Paid Farmers Union, supplies for grounds		8 00
June 24..	T. 81	Paid D. C. Dunn, painting signs		6 00
July 28..	T. 82	Paid Hawley Bros. Hardware Co., lawn mower		80 00
July 28..	T. 83	Paid Daunes & Van Doren, coal		36 15
July 28..	T. 84	Paid Charles Oeckel, hay		15 10
July 28..	T. 85	Paid S. C. V. M. & L. Co., lumber		5 80
July 28..	T. 86	Paid J. Boschken, supplies for grounds		5 05
July 28..	T. 87	Paid Chas. H. Allen, traveling expenses as Sec'y		70 00
July 28..	117	Paid James W. Queen & Co., apparatus		681 25
July 28..	118	Paid H. A. Ward, models and casts for museum		156 80
July 28..	119	Paid Osborn & Alexander, tools		157 55
July 28..	120	Paid T. Soper, carpenter work and material		104 70
July 28..	121	Paid Farmers' Union, tools, etc.		43 03
July 28..	122	Paid Parker & Lacy, forge		35 00
July 28..	123	Paid George F. Wells, piano		250 00
July 28..	124	Paid G. G. Wickson & Co., type writer, desk, etc.		135 60
July 28..	125	Paid L. Lion, carpet for platforms		28 65
July 28..	126	Paid S. J. Gas Co., gas 6 months, to June 30, 1887		28 35
July 28..	127	Paid S. H. Wagener, chemicals		12 08
July 28..	128	Paid Daunes & Van Doren, coal		12 00
July 28..	129	Paid A. R. Denike, tuning and repairing pianos		22 50
July 28..	130	Paid L. Aubert, cleaning carpets		22 60
July 28..	131	Paid C. H. Allen, freight and hauling		45 34
July 28..	132	Paid Miss B. Warren, filling diplomas		33 50
July 28..	133	Paid J. P. Jarman, slating boards		35 50
July 28..	134	Paid George B. McKee & Co., paint, oil, etc.		10 05
July 28..	135	Paid Sunset Telephone Co., box rent 6 months, to June 30, 1887		15 00
July 28..	136	Paid Milton Campbell, tanks		17 00
July 28..	137	Paid S. C. V. M. & L. Co., lumber and mill work		12 59
Aug. 25..	*138	Paid Sterling Furniture Company, tables		75 00
Aug. 25..	*139	Paid G. G. Wickson & Co., autcopyist and supplies		22 15
		Balance of Tuition Fund, close of thirty-eighth fiscal year		2,633 35
		Balance of appropriation not drawn from State Treasury		1,677 82
		Totals	\$49,365 08	\$49,365 08

* Vouchers Nos. 83, 84, 138, 139 have not been allowed by the State Board of Examiners, amounting to: No. 83, \$57 98; No. 84, \$22; No. 138, \$75; No. 139, \$22 15; total, \$177 13.

SUMMARY OF ABOVE REPORT.

	Dr.	Cr.
Total income for thirty-eighth fiscal year	\$49,365 08	
Expended for salaries of teachers and janitor		\$32,774 80
Expended for stationery		369 58
Expended for furniture and apparatus		3,881 97
Expended for fuel and gas		779 89
Expended for general supplies		310 37
Expended for books and periodicals		436 33
Expended for repairs and improvements		456 12
Miscellaneous expenditures		844 03
Total for current expenses of school		\$39,853 09
Expended for salaries of gardeners and other labor on grounds		\$2,969 72
Expended for fuel for engine		478 35
Expended for tools and repairs to same		229 19
Expended for water pipes and hose		1,020 63
Expended for supplies and repairs on grounds		423 38
Expended for trees and seeds		79 55
Total for grounds		\$5,200 82
Total unexpended balance		\$4,311 17
Totals	\$49,365 08	\$49,365 08

Appropriation for Library of State Normal School, San José.

Date of Auditing.	No. of Voucher.		Dr.	Cr.
1886.				
		Balance of appropriation unexpended, as per last report	\$487 55	
July 15..	3	Paid J. Dewing Co., Life of Grant		\$10 00
Nov. 18..	4	Paid Geo. W. Welch, books		26 92
1887.				
Jan. 20..	5	Paid Geo. W. Welch, books		315 70
Jan. 20..	6	Paid E. L. Kellogg & Co., books		58 20
Jan. 20..	7	Paid A. W. Hollis, atlas		9 00
April 14..	8	Paid Geo. W. Welch, books		67 73
		Totals	\$487 55	\$487 55

REPORT OF PRINCIPAL OF STATE NORMAL SCHOOL, SAN JOSE.

To the Board of Trustees of the California State Normal Schools:

GENTLEMEN: I have the honor to submit the following report of the Normal School in San José, under your charge, for the school year ending May 26, 1887:

STATISTICAL.

During the year there have applied for admission two hundred eighty-four pupils. These applied for and were admitted to classes, as given below:

Applied for Senior Class	10	Admitted to Senior Class	5
Applied for Second Term, Middle Class. .	8	Admitted to Second Term, Middle Class. .	2
Applied for First Term, Middle Class. . .	55	Admitted to First Term, Middle Class ..	26
Applied for Second Term, Junior Class .	77	Admitted to Second Term, Junior Class. .	42
Applied for First Term, Junior Class ...	134	Admitted to First Term, Junior Class ..	164
Total number examined	284	Total number admitted.....	239

Rejected, or assigned to Preparatory Class, 45.

Holders of Grammar School Diplomas admitted to Junior B, 64.

Holders of Grammar School Diplomas admitted on examination to higher classes, 18.

Holders of High School Diplomas admitted to Junior B, 11.

Holders of High School Diplomas admitted on examination to higher classes, 16.

Holders of Teachers' certificates admitted to Junior B, 4.

Admitted by transfer from other Normal Schools, 3.

Many of those admitted to Junior Classes were pupils who had applied for admission to advanced classes. Applicants for admission have represented forty-two counties of this State, and eight other States and Territories.

Forty-six counties of California have had representatives in the school during the past year.

The counties not represented are Alpine, Inyo, Lassen, Los Angeles, San Bernardino, and Ventura.

Besides students residing in this State, there have been representatives from eight other States and four Territories. Of these, twelve are from the State of Nevada.

The highest enrollment during the year was 586, in January; average enrollment, 573; average daily attendance, 560; average percentage of attendance, 98.7; average percentage of punctuality, 99.7.

The table given below, showing the enrollment for the last ten years, is instructive. From 1876 to 1879, the Preparatory Class was so large that two teachers were employed. In 1879-80 the class was reduced to about fifty and put in charge of one teacher. This, and some other considerations, reduced the total, something more than one hundred.

	1876-77.	1877-78.	1878-79.	1879-80.	1880-81.	1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.
Senior	53	69	60	57	52	96	177	180	175	137	164
Middle	164	207	189	169	181	237	209	196	137	157	178
Junior	242	224	223	184	199	215	247	224	216	203	290
Preparatory	78	103	76	58	57	52	48	45	38	56	59
Total in Normal	537	603	548	468	489	600	681	645	566	553	691
Training Department.....	128	109	113	109	101	103	115	115	135	129	136
Grand total.....	665	712	661	577	590	703	796	760	701	682	827

During the present year, as will be seen, we have reached the highest number ever enrolled in the school, namely, six hundred and ninety-one in the Normal Department, and more than eight hundred in the entire school. We have had a larger number of Normal pupils enrolled than any other *State* Normal School in the United States. The Normal College of New York City, and the Normal School for Girls in Philadelphia, alone outnumber us.

The changes in the course of study, particularly advancing the grade for admission, will doubtless reduce the number of pupils for the next year or two; closing the Preparatory Class will contribute to the same result. The additional interest in normal instruction, and the increasing demand for trained teachers will, however, keep the attendance pretty nearly what it has been in previous years.

The liberal provision made for supplying the school with additional illustrative apparatus will make the work of the coming year easier and more efficient, and some good practical results are anticipated from the establishment even of a small mechanical department.

The appropriation of one thousand dollars a year for the library will enable us to add greatly to the means of culture already placed within the reach of our pupils. It is a gratifying fact that the library is becoming a more and more important feature in the school, and its influence is being felt in the work of every class. It is no small part of the equipment of a young teacher that he has formed even a casual acquaintance with a library of well selected books.

In regard to the general work of the school, my report made at the December meeting was so full that I do not deem it necessary to repeat any part of it here.

Thanking you, again, gentlemen, for your uniform kindness, and for the patience with which you have listened to and provided for our wants, I am,

Very respectfully, your obedient servant,

CHARLES H. ALLEN,
Principal.

SAN JOSÉ, May, 1887.

FINANCIAL REPORT

Of Branch State Normal School, Los Angeles, for Thirty-eighth Fiscal Year, ending June 30, 1887.

Date of Auditing.	No. of Voucher.		Dr.	Cr.
1886.		<i>General Fund.</i>		
		Balance of appropriation for thirty-seventh fiscal year on hand July 1, 1886, as per last report.	\$1,070 07	
		Amount of appropriation for thirty-eighth fiscal year.....	16,000 00	
		Balance of Petty Cash Fund on hand July 1, 1886, as per last report.....	56 74	
		Amount of receipts for rent of rooms, tuition, and sundries, thirty-eighth fiscal year.....	353 50	
July 15..	1-8	Paid for salaries for July, 1886.....		\$1,116 75
Aug. 26..	9-17	Paid for salaries for August, 1886.....		1,166 65
Aug. 26..	18	Paid L. A. Gas Co., gas for July, 1886.....		90
Aug. 26..	19	Paid L. A. City Water Co., water for July, 1886.....		9 25
Aug. 26..	20	Paid V. Beaudry, water for July, 1886.....		3 67
Aug. 26..	21	Paid Sunset Telephone Co., rent for July, 1886.....		5 00
Aug. 26..	22	Paid Sunset Telephone Co., rent for August, 1886.....		5 00
Aug. 26..	23	Paid Whittier, Fuller & Co., paints, oils, etc.....		12 90
Aug. 26..	24	Paid Jos. Gastreich, painting and graining.....		14 00
Sept. 23..	25	Paid L. A. City Water Co., water for August, 1886.....		13 80
Sept. 23..	26	Paid Sunset Telephone Co., rent for Sept., 1886.....		5 00
Sept. 23..	27	Paid Home of Adult Blind, brooms.....		16 25
Sept. 23..	28	Paid History Co., two vols. Bancroft's History.....		11 00
Sept. 23..	29-37	Paid for salaries for September, 1886.....		1,166 65
Oct. 15..	38-46	Paid for salaries for October, 1886.....		1,166 65
Oct. 15..	47	Paid L. A. Gas Co., gas for August, 1886.....		2 70
Oct. 15..	48	Paid L. A. Gas Co., gas for September, 1886.....		4 50
Oct. 15..	49	Paid L. A. City Water Co., water for Sept., 1886.....		14 75
Oct. 15..	50	Paid Citizens Water Co., water for August and September, 1886.....		2 70
Oct. 15..	51	Paid Sunset Telephone Co., rent for Oct., 1886.....		5 00
Oct. 15..	52	Paid Weinshank & Knox, plumbing.....		22 50
Oct. 15..	53	Paid W. C. Furrey, tools, school supplies, etc.....		30 95
Nov. 18..	54-62	Paid for salaries for November, 1886.....		1,166 65
Nov. 18..	63	Paid Hirschfeld & Seldner, stationery.....		66 80
Nov. 18..	64	Paid S. M. Perry, plumbing.....		13 00
Nov. 18..	65	Paid Citizens Water Co., water for October, 1886.....		11 00
Nov. 18..	66	Paid Los Angeles City Water Company, water for October, 1886.....		9 75
Nov. 18..	67	Paid Los Angeles Gas Company, gas for October, 1886.....		3 90
Nov. 18..	68	Paid Sunset Telephone Company, rent for November, 1886.....		5 00
Dec. 15..	69-77	Paid for salaries for December, 1886.....		1,166 65
Dec. 15..	78	Paid Citizens Water Company, water for November, 1886.....		13 50
Dec. 15..	79	Paid Los Angeles City Water Company, water for November, 1886.....		11 10
Dec. 15..	80	Paid Sunset Telephone Company, rent for December, 1886.....		5 00
Dec. 15..	81	Paid J. A. Cline, mounting birds.....		27 00
1887.				
Jan. 20..	82-90	Paid for salaries for January, 1887.....		1,166 65
Jan. 20..	91	Paid W. H. Maxwell, coal.....		175 75
Jan. 20..	92	Paid Hirschfeld & Seldner, stationery.....		80 85
Jan. 20..	93	Paid Los Angeles City Water Company, water for December, 1886.....		9 00
Jan. 20..	94	Paid Citizens Water Company, water for December, 1886.....		8 85
Jan. 20..	95	Paid Los Angeles Gas Company, gas for November, 1886.....		4 80
Jan. 20..	96	Paid Los Angeles Gas Company, gas for December, 1886.....		6 00
Jan. 20..	97	Paid Sunset Telephone Company, rent for January, 1887.....		5 00

FINANCIAL REPORT—Continued.

Date of Auditing.	No. of Voucher.		Dr.	Cr.
Jan. 20..	98	Paid O. W. Childs, rent of Opera House, December, 1886.....		\$25 00
Jan. 20..	99	Paid Times-Mirror Company, programmes.....		15 00
Jan. 20..	100	Paid H. P. McKusick, books.....		15 00
Jan. 20..	101	Paid J. A. Cline, mounted birds.....		27 00
Jan. 20..	102	Paid Weinsbank & Knox, plumbing.....		4 20
Feb. 17..	103-111	Paid for salaries for February, 1887.....		1,166 65
Feb. 17..	112	Paid Citizens Water Company, water for January, 1887.....		9 92
Feb. 17..	113	Paid Los Angeles City Water Company, water for January, 1887.....		1 40
Feb. 17..	114	Paid Sunset Telephone Company, rent for February, 1887.....		5 00
Feb. 17..	115	Paid Los Angeles Gas Company, gas for January, 1887.....		2 40
Feb. 17..	116	Paid J. Dewing Co., Atlas.....		22 50
Mar. 17..	117-125	Paid for salaries for March, 1887.....		1,166 65
Mar. 17..	126	Paid Los Angeles City Water Company, water for February, 1887.....		5 50
Mar. 17..	127	Paid Los Angeles Gas Company, gas for February, 1887.....		4 50
Mar. 17..	128	Paid Sunset Telephone Company, rent for March, 1887.....		5 00
Mar. 17..	129	Paid The J. Dewing Co., blackboard erasers.....		27 50
Mar. 17..	130	Paid W. C. Furrey, hardware and supplies.....		15 40
Mar. 17..	131	Paid E. H. Gassett & Co., chemicals.....		11 60
Mar. 17..	132	Paid F. H. Rogers, photographs.....		15 00
Mar. 17..	133	Paid Hirschfeld & Seldner, subscription to periodicals.....		11 00
April 14..	134-142	Paid for salaries for April, 1887.....		1,166 65
April 14..	143	Paid Citizens Water Co., water for February and March, 1887.....		16 15
April 14..	144	Paid L. A. City Water Co., water for March, 1887.....		11 20
April 14..	145	Paid L. A. Gas Co., gas for March, 1887.....		1 80
April 14..	146	Paid Hirschfeld & Seldner, stationery.....		19 00
April 14..	147	Paid Cooke, Wiseman & Co., binding magazines.....		17 00
April 14..	148	Paid History Co., 2 Vols. Bancroft's History.....		11 00
April 14..	149	Paid Theo. Wollweber, chemicals.....		36 17
April 14..	150	Paid L. A. Electrical Works, barometer.....		15 00
April 14..	151	Paid T. A. Garey, roses.....		37 85
May 25..	152-160	Paid for salaries for May, 1887.....		1,166 65
May 25..	161	Paid L. A. City Water Co., water for April, 1887.....		8 10
May 25..	162	Paid Citizens Water Co., water for April, 1887.....		7 70
May 25..	163	Paid L. A. Gas Co., gas for April, 1887.....		1 50
May 25..	164	Paid Sunset Telephone Co., rent and service for April, 1887.....		6 00
May 25..	165	Paid Sunset Telephone Co., rent and service for May, 1887.....		5 25
May 25..	166	Paid H. W. A. Nahl, diplomas.....		21 75
June 24..	167-174	Paid for salaries for June, 1887.....		1,116 65
June 24..	175	Paid L. A. City Water Co., water for May, 1887.....		10 80
June 24..	176	Paid L. A. City Water Co., water for June, 1887.....		12 00
June 24..	177	Paid Citizens Water Co., water for May, 1887.....		5 00
June 24..	178	Paid Citizens Water Co., water for June, 1887.....		8 40
June 24..	179	Paid L. A. Gas Co., gas for May, 1887.....		3 00
June 24..	180	Paid L. A. Gas Co., gas for June, 1887.....		3 90
June 24..	181	Paid Sunset Telephone Co., rent for June, 1887.....		5 00
June 24..	182	Paid H. C. Wyatt, rent of Opera House.....		25 00
June 24..	183	Paid Times-Mirror Co., programmes.....		12 00
June 24..	184	Paid L. B. Lawson, lettering diplomas.....		10 00
June 24..	185	Paid P. Hirschfeld & Co., stationery and periodicals.....		76 75
June 24..	186	Paid W. C. Furrey, tools and hardware.....		48 00
June 24..	187	Paid Brown & Foster, tools and agricultural implements.....		23 28
Aug. 25..	*188	Paid Antonin Sperl, extension and repairing of fence.....		161 43
Aug. 25..	*189	Paid Asa Adams, lumber and labor.....		88 16

*Vouchers Nos. 188 and 189 have not been allowed by the State Board of Examiners, amounting to \$249 59.

FINANCIAL REPORT—Continued.

Date of Auditing.	No. of Voucher.		Dr.	Cr.
		<i>Bills Paid by Ira More, Principal, from Petty Cash Fund.</i>		
		Paid for postage, freight, express, exchange, and advertising for proposals		\$52 72
		Paid for furniture and apparatus		16 35
		Paid for books and periodicals		44 50
		Paid for sundry supplies		12 63
		Paid for commencement expenses		27 50
		Paid for labor and tools on grounds		26 30
		Paid for discount on warrants in payment on contracts		146 00
		Balance of appropriation not drawn from State Treasury, at close of thirty-eighth fiscal year		1,602 89
		Balance of petty cash fund on hand, at close of thirty-eighth fiscal year		84 24
		Totals	\$17,480 31	\$17,480 31

SUMMARY OF ABOVE REPORT.

	Dr.	Cr.
Total income for support for thirty-eighth fiscal year	\$17,480 31	
Expended for salaries of teachers and janitor		\$13,899 90
Expended for stationery		230 15
Expended for furniture and apparatus		120 10
Expended for fuel, water, and gas		419 19
Expended for books and periodicals		145 25
Expended for general supplies		194 28
Expended for repairs and improvements		66 60
Expended for grounds		313 74
Miscellaneous expenditures		403 97
Total amount expended		\$15,793 18
Total unexpended balance		1,687 13
Totals	\$17,480 31	\$17,480 31

Appropriation for the purchase of books for the Library of the Branch State Normal School at Los Angeles.

Date of Auditing.	No. of Voucher.		Dr.	Cr.
1886.		Balance of appropriation unexpended, as per last report	\$143 78	
Dec. 15.	7	Paid George W. Welch, books		\$137 36
		Balance of appropriation not drawn from State Treasury		6 42
		Totals	\$143 78	\$143 78

Appropriation for additional furniture for the Branch Normal School at Los Angeles.

Date of Auditing.	No. of Voucher.		Dr.	Cr.
1886.		Balance of appropriation unexpended, as per last report.....	\$358 83	
Nov. 18..	8	Paid James W. Queen & Co., solar microscope and fittings		\$100 00
Dec. 15..	9	Paid James W. Queen & Co., binocular microscope and fittings		200 00
1887.				
Feb. 17..	10	Paid Bancroft Bros. & Co., maps, charts, etc.		46 35
		Balance of appropriation not drawn from State Treasury		12 48
		Totals	\$358 83	\$358 83

Appropriation for payment of Gardener for Branch Normal School at Los Angeles.

Date of Auditing.	No. of Voucher.		Dr.	Cr.
1886.		Balance of appropriation unexpended, as per last report.....	\$957 70	
Sept. 23..	9	Paid John W. Hoyt, work on grounds.....		\$50 00
Oct. 15..	10	Paid John W. Hoyt, work on grounds.....		46 50
Nov. 18..	11	Paid John W. Hoyt, work on grounds.....		51 00
Nov. 18..	12	Paid M. J. Clark, work on grounds		44 00
Nov. 18..	13	Paid M. S. Whitcomb, hauling manure		30 00
Dec. 15..	14	Paid John W. Hoyt, work on grounds.....		46 50
Dec. 15..	15	Paid M. J. Clark, work on grounds		46 00
Dec. 15..	16	Paid M. S. Whitcomb, hauling manure		58 00
1887.				
Jan. 20..	17	Paid John W. Hoyt, work on grounds.....		63 50
Jan. 20..	18	Paid M. J. Clark, work on grounds		39 00
Jan. 20..	19	Paid M. S. Whitcomb, work on grounds		48 00
Feb. 17..	20	Paid John W. Hoyt, work on grounds.....		48 50
Feb. 17..	21	Paid M. S. Whitcomb, work on grounds		18 00
Mar. 17..	22	Paid John W. Hoyt, work on grounds.....		39 50
Mar. 17..	23	Paid M. J. Clark, work on grounds		23 00
Mar. 17..	24	Paid M. S. Whitcomb, work on grounds		35 00
Apr. 14..	25	Paid John W. Hoyt, work on grounds.....		43 00
Apr. 14..	26	Paid M. J. Clark, work on grounds		44 00
Apr. 14..	27	Paid M. S. Whitcomb, work on grounds		16 00
May 25..	28	Paid John W. Hoyt, work on grounds.....		54 00
June 24..	29	Paid John W. Hoyt, work on grounds.....		79 00
June 24..	30	Paid M. S. Whitcomb, work on grounds		16 00
		Balance of appropriation not drawn from State Treasury		19 20
		Totals	\$957 70	\$957 50

Appropriation for improvement of grounds of Branch Normal School, Los Angeles.

Date of Auditing.	No. of Voucher.		Dr.	Cr.
1886.		Balance of appropriation unexpended, as per last report.....	\$5,509 55	
Aug. 26..	16	Paid Bly & Son, stonework, on account.....		\$1,000 00
Aug. 26..	17	Paid P. J. Boland, balance on grading.....		88 60
Aug. 26..	18	Paid M. S. Whitcomb, sand.....		75 00
Aug. 26..	19	Paid M. R. Gridley, gravel.....		65 00
Sept. 23..	20	Paid Bly & Son, stonework, on account.....		1,000 00
Sept. 23..	21	Paid S. M. Perry, water pipes and laying.....		280 06
Sept. 23..	22	Paid M. R. Gridley, gravel.....		40 00
Sept. 23..	23	Paid G. H. Williams, gravel.....		30 00
Sept. 23..	24	Paid J. C. Hill, gravel.....		21 50
Sept. 23..	25	Paid M. S. Whitcomb, sand.....		75 00
Sept. 23..	26	Paid Perry Mill and Lumber Company, lumber and labor on bridges.....		15 35
Sept. 23..	27	Paid E. T. Wright, surveying.....		9 00
Oct. 15..	28	Paid Bly & Son, balance on stonework.....		1,712 57
Oct. 15..	29	Paid Smith, Hutton & Clark, drawing contracts, etc.....		30 00
Oct. 15..	30	Paid M. S. Whitcomb, sand.....		75 00
Oct. 15..	31	Paid M. R. Gridley, gravel.....		40 00
Oct. 15..	32	Paid G. H. Williams, gravel.....		30 00
Nov. 18..	33	Paid Baker Iron Works, hitching posts.....		40 00
Nov. 18..	34	Paid M. R. Gridley, gravel.....		16 40
Nov. 18..	35	Paid G. H. Williams, gravel.....		12 30
Dec. 15..	36	Paid A. Sperl, payment on fence contract.....		300 00
Dec. 15..	37	Paid M. S. Whitcomb, sand.....		42 75
1887.				
Mar. 17..	38	Paid O. W. Childs, nursery stock.....		46 95
Mar. 17..	39	Paid Milton Thomas, nursery stock.....		12 75
May 25..	40	Paid Hansen & Solano, engineering work.....		291 00
June 24..	41	Paid Antonin Sperl, balance on fence contract.....		160 32
		Totals.....	\$5,509 55	\$5,509 55

REPORT OF PRINCIPAL OF BRANCH NORMAL SCHOOL, LOS ANGELES.

To the Board of Trustees of the California State Normal Schools:

GENTLEMEN: The fifth and last year of the Branch Normal School is about closing, and the institution is to assume its new standing and added duties as one of the State Normal Schools of California.

The growth of the school has during the year been continuous with that of the four previous years since its organization. The following table of aggregates show this:

1882-83	127
1883-84	187
1884-85	231
1885-86	252
1886-87	278

A class of twenty was graduated at Christmas, and we now present a class of twenty-eight for graduation, they having completed in full the course of study and discipline prescribed by you for the Normal Schools of the State.

Graduates of the school year 1886-87..... 48

Accompanying this report is a list of the graduates from the sending out of the first class in the summer of 1884 to the present time. We are too young yet as an institution to sum the results of our work. The oldest class has been out but three years. I have given in the record of this class, opposite each name, the length of time the student has devoted to teaching since graduating, and find the rather remarkable average of more than two and one half years' teaching, where only three years was possible. Other classes have done as well in the shorter time they have been at work. I think we may confidently expect that no class will close its record with less than ten years' teaching for its average.

The grounds, some five and one half acres in extent, belonging to the school, have been graded, the retaining walls built, the needful walks laid down, and roads made, fitting them for the use of the school so far as it was possible with the appropriation made for the purpose. The work was done early enough to be tested by the last rainy season, and found to be all that could be desired; and although more money might well be spent in fitting up and beautifying the grounds, they are now in excellent order so far as the comfort and convenience of the school is concerned.

I have arranged the calendar for the coming year, 1887-88, in accordance with the published report of your action at the last meeting, making July and August vacation months. It makes no change in the arrangement of the studies, and will, I think, be an improvement upon the calendar of past years in several respects, prominent among which is the avoidance of the warmest part of the season, and the accordance with the year as arranged for the public schools.

The prospect for the future of the school was never brighter than now. Southern California is rapidly filling up with people, her school facilities

are keeping pace with her increased population, giving us at once better material and requiring well fitted teachers at our hands. And the public know well what to expect of a normal school. The day is past when people might talk of the normal method as though the work of the normal school was to teach a special method for doing this or that. It is now seen that the good teacher is broader than any method. He bases his work upon deeper principles, going down to the substratum upon which rest all methods. He then originates or selects the best from all. With a wide command of language, he never quibbles on disputed niceties of grammar; with a thorough mathematical knowledge, he never prides himself upon the tricks by which special examples are wrought. The methods of normal schools are but samples of the infinite variety at command of him who has thoroughly mastered the underlying thought.

Very respectfully submitted.

IRA MORE.

LOS ANGELES, May, 1887.

REPORT OF THE TRUSTEES OF THE STATE NORMAL SCHOOLS.

OFFICE OF THE BOARD OF TRUSTEES OF THE }
STATE NORMAL SCHOOL AT SAN JOSÉ, October, 1888. }

To his Excellency R. W. WATERMAN, Governor:

SIR: We have the honor to submit the following detailed report of receipts and expenditures for carrying on the Normal School under our charge, for the thirty-ninth fiscal year. We ask a careful scrutiny of this report, believing it will afford the best guarantee of an economical expenditure of future appropriations.

The number in attendance upon the school is largely increased, probably owing to the increased demand for teachers.

For the next two fiscal years, to enable the school to do the work for which it is designed, the following appropriations will be needed:

For current expenses.....	\$78,000
For library.....	2,000
For care of grounds.....	2,000
For painting and repairing building.....	750
Total.....	\$82,750

For a statement of the scholastic work of the school, we respectfully call attention to the catalogue and to the report of the Principal herewith submitted.

In the erection of the building for the Branch Normal School at Chico, we have audited and allowed to date, bills to the amount of \$32,088 85, all properly attested. The detailed report of this expenditure will be made at the proper time.

We have the honor to be, very respectfully, your obedient servants,

RALPH LOWE,
President Board of Trustees.

RUTH ROYCE, Secretary.

FINANCIAL REPORT

Of State Normal School, San José, for Thirty-ninth Fiscal Year, ending June 30, 1888.

Date of Auditing.	No. of Voucher.		Dr.	Cr.
1887.		Appropriation, thirty-ninth fiscal year.....	\$39,000 00	
		Balance of tuition fund from thirty-eighth fiscal year, as per last report.....	2,633 35	
		Tuition collected for thirty-ninth fiscal year....	3,006 00	
		Received for sale of engine	250 00	
		Library receipts, piano rent, etc.....	211 00	
July 28.		Paid for salaries for July, 1887.....		\$2,442 89
July 28.	A. 1	Paid F. A. Taylor, periodicals		43 80
July 28.	T. 1	Paid for payroll on grounds, July, 1887		232 50
Aug. 25.		Paid for salaries for August, 1887		2,837 89
Aug. 25.	A. 2	Paid State of California, text-books		30 00
Aug. 25.	T. 2	Paid for payroll on grounds, August, 1887		230 00
Aug. 25.	T. 3	Paid L. Chaize, valves for engine		4 00
Aug. 25.	T. 4	Paid Ed. Wale, wood		90 00
Aug. 25.	T. 5	Paid Ed. Wale, wood		72 50
Sept. 29.		Paid for salaries for September, 1887.....		2,872 89
Sept. 29.	A. 3	Paid Flora E. Lacy, services as substitute		45 00
Sept. 29.	A. 4	Paid Davis & Co., hardware		5 00
Sept. 29.	A. 5	Paid J. H. Elwood, music charts		20 00
Sept. 29.	A. 6	Paid Charles H. Parsons, finishing cases		8 50
Sept. 29.	A. 7	Paid Friant & Co., manilla paper		4 80
Sept. 29.	A. 8	Paid A. Waldteufel, Encyclopædia Brit. (Vol. 22)		10 25
Sept. 29.	A. 9	Paid McNeil Bros., bookbinding		33 05
Sept. 29.	T. 6	Paid for payroll on grounds, September, 1887.....		232 50
Sept. 29.	T. 7	Paid George Koerber, wood		70 00
Sept. 29.	T. 8	Paid Charles Oeckel, hay		28 90
Sept. 29.	T. 7	Paid F. Altman, repairing engine		7 55
Sept. 29.	T. 10	Paid McNeil Bros., spelling blanks		52 50
Sept. 29.	T. 11	Paid Mercury and Herald, advertising training department		8 50
Oct. 27.		Paid for salaries for October, 1887.....		2,872 89
Oct. 27.	A. 10	Paid Daunes & Van Doren, coal		360 58
Oct. 27.	A. 11	Paid E. H. Guppy & Son, stationery		115 06
Oct. 27.	A. 12	Paid Ruth Royce, Secretary, postage, express-age, etc.		59 75
Oct. 27.	A. 13	Paid Farmers Union, tools and hardware		10 75
Oct. 27.	A. 14	Paid A. & J. Martin, piano cover		4 75
Oct. 27.	A. 15	Paid S. J. Mercury, advertising for stationery		3 00
Oct. 27.	A. 16	Paid Herald Co., advertising for stationery		2 00
Oct. 27.	T. 12	Paid for payroll on grounds, October, 1887.....		210 00
Oct. 27.	T. 13	Paid Victor Pachand, loam		19 12
Oct. 27.	T. 14	Paid Frank W. McEwen, wood		174 60
Oct. 27.	T. 15	Paid Ed. Wale, wood		13 00
Oct. 27.	T. 16	Paid Farmers Union, supplies		14 05
Oct. 27.	T. 17	Paid Bank D. O. Mills & Co., collecting warrants		13 00
Nov. 28.		Paid for salaries for November, 1887.....		2,872 89
Nov. 28.	A. 17	Paid S. H. Wagener, chemicals		12 90
Nov. 28.	A. 18	Paid George Denne, framing and mounting pictures		7 80
Nov. 28.	A. 19	Paid T. Soper, carpenter work		9 92
Nov. 28.	A. 20	Paid Ruth Royce, Secretary, freight and hauling		13 24
Nov. 28.	A. 21	Paid A. R. Denike, tuning piano		2 50
Nov. 28.	A. 22	Paid D. Appleton & Co., text-books		54 71
Nov. 28.	A. 23	Paid G. W. Welch, text-books		3 00
Nov. 28.	T. 18	Paid for payroll on grounds, November, 1887.....		188 75
Nov. 28.	T. 19	Paid J. A. Belloli, barley and seed		48 59
Nov. 28.	T. 20	Paid Morgan Miles, grass seed		32 00
Nov. 28.	T. 21	Paid J. Boschken, tools and hardware		28 50
Dec. 21.		Paid for salaries for December, 1887.....		2,872 89
Dec. 21.	A. 24	Paid Daunes & Van Doren, coal		387 75
Dec. 21.	A. 25	Paid E. H. Guppy & Son, stationery		294 79
Dec. 21.	A. 26	Paid Gillespie & Saph, lumber		59 32
Dec. 21.	A. 27	Paid D. Appleton & Co., text-books		20 30
Dec. 21.	A. 28	Paid H. W. A. Nahl, diplomas		45 00
Dec. 21.	A. 29	Paid Lambert Hayman, filling diplomas		15 00
Dec. 21.	A. 30	Paid J. H. Elwood, sheet music		7 20

FINANCIAL REPORT—Continued.

Date of Auditing.	No. of Voucher.		Dr.	Cr.
Dec. 21..	A. 31	Paid Mrs. A. E. Bush, museum expenses		\$6 10
Dec. 21..	A. 32	Paid Ruth Royce, services as Secretary, six months		75 00
Dec. 21..	T. 22	Paid for payroll on grounds, December, 1887		180 00
Dec. 21..	T. 23	Paid George Schmidt, loam		5 00
1888.				
Jan. 24..		Paid for salaries for January, 1888		3,106 22
Jan. 24..	A. 33	Paid J. C. Corcoran, plumbing repairs		144 16
Jan. 24..	A. 34	Paid McNeil Bros., bookbinding		41 70
Jan. 24..	A. 35	Paid T. Soper, carpenter work		49 83
Jan. 24..	A. 36	Paid S. L. Clôse, repairing blackboards		11 75
Jan. 24..	A. 37	Paid San José Gas Company, gas six months		35 70
Jan. 24..	A. 38	Paid A. H. Randall, apparatus		12 20
Jan. 24..	A. 39	Paid W. D. Allison, clock		6 50
Jan. 24..	A. 40	Paid E. J. Gillespie, drawing-books		2 10
Jan. 24..	A. 41	Paid Ruth Royce, Sec'y, postage, express, etc.		39 55
Jan. 24..	A. 42	Paid C. H. Allen, commencement exercises		32 25
Jan. 24..	A. 43	Paid A. R. Denike, tuning pianos		5 00
Jan. 24..	A. 44	Paid sundry persons, premiums on insurance		750 00
Jan. 24..	T. 24	Paid for payroll on grounds, January, 1888		192 50
Jan. 24..	T. 25	Paid J. C. Corcoran, waterpipes, etc.		283 02
Jan. 24..	T. 26	Paid Charles Oeckel, hay		19 05
Jan. 24..	T. 27	Paid David Walsh, blacksmithing		17 25
Feb. 28..		Paid for salaries, for February, 1888		3,106 22
Feb. 28..	A. 45	Paid C. F. Willey, slating and repairing boards		10 00
Feb. 28..	A. 46	Paid T. Soper, carpenter work and material		7 44
Feb. 28..	A. 47	Paid Lloyd E. Schallenberger, screen		9 00
Feb. 28..	A. 48	Paid J. Boschken, shears		4 50
Feb. 28..	T. 28	Paid for payroll on grounds, February, 1888		187 50
Feb. 28..	T. 29	Paid S. C. V. M. & L. Co., skylights and lumber		49 46
Feb. 28..	T. 30	Paid John Rock, trees		51 30
Feb. 28..	T. 31	Paid R. D. Fox, trees		1 80
Feb. 28..	T. 32	Paid H. Booksin, Jr., spraying trees		50 00
Feb. 28..	T. 33	Paid Mercury and Herald, advertising		9 15
Feb. 28..	T. 34	Paid William Grey, repairing engine		3 00
Mar. 29..		Paid for salaries for March, 1888		3,106 22
Mar. 29..	A. 49	Paid Sunset Telephone Co., box rent six months		15 00
Mar. 29..	A. 50	Paid Daunes & Van Doren, coal		20 00
Mar. 29..	A. 51	Paid T. K. Black & Co., Janitor supplies		5 65
Mar. 29..	A. 52	Paid C. H. Allen, freight and hauling		13 32
Mar. 29..	A. 53	Paid Fannie L. Matson, reading and numbering frame		40 00
Mar. 29..	A. 54	Paid A. Friant & Co., manilla paper		5 10
Mar. 29..	T. 35	Paid for payroll on grounds, March, 1888		225 25
Mar. 29..	T. 36	Paid Charles Oeckel, hay		19 10
April 26..		Paid for salaries for April, 1888		3,106 22
April 26..	A. 55	Paid Mary E. Wilson, supplies, Training Dep't.		28 98
April 26..	A. 56	Paid James Denman, traveling expenses, August, 1887		10 00
April 26..	A. 57	Paid James Denman, traveling expenses, April, 1888		96 40
April 26..	A. 58	Paid Lawrence Archer, traveling expenses, April, 1888		91 60
April 26..	A. 59	Paid T. Ellard Beans, traveling expenses, April, 1888		91 60
April 26..	A. 60	Paid T. H. Laine, traveling expenses, April, 1888		91 60
April 26..	A. 61	Paid Ralph Lowe, traveling expenses, April, 1888		91 60
April 26..	T. 37	Paid for payroll on grounds, April, 1888		275 50
April 26..	T. 38	Paid Milton Campbell, repairs to pipes and pump		9 00
April 26..	T. 39	Paid W. J. Wolcott, setting boiler		45 70
April 26..	T. 40	Paid Charles Oeckel, straw		15 00
May 24..		Paid salaries for May, 1888		3,176 22
May 24..	A. 62	Paid E. H. Guppy & Son, stationery		72 45
May 24..	A. 63	Paid C. H. Allen, Secretary joint Boards, and sundries		25 15
May 24..	A. 64	Paid C. H. Allen, traveling expenses, April, 1888		49 00
May 24..	T. 41	Paid for payroll on grounds, May, 1888		235 00
May 24..	T. 42	Paid J. T. Cammeyer & Co., belting for engine		53 14

FINANCIAL REPORT—Continued.

Date of Auditing.	No. of Voucher.		Dr.	Cr.
May 24..	T. 43	Paid Luther & Schroeder, hose and sprinklers.....		\$199 00
May 24..	T. 44	Paid John Stock Sons, hose.....		41 90
May 24..	T. 45	Paid F. Kuchenbeiser, iron fence.....		185 80
May 24..	T. 46	Paid M. W. Lipe, cutting wood.....		6 00
June 18..		Paid for salaries for June, 1888.....		2,701 22
June 18..	A. 65	Paid C. Jost & Son, alcohol.....		62 18
June 18..	A. 66	Paid H. W. A. Nahl, diplomas.....		30 00
June 18..	A. 67	Paid McNeil Bros., printing.....		18 75
June 18..	A. 68	Paid Bertha Warren, filling diplomas.....		32 00
June 18..	T. 47	Paid for payroll on grounds, June, 1888.....		266 25
June 18..	T. 48	Paid Charles Oeckel, hay.....		12 60
June 18..	T. 49	Paid Sidney Brown, painting fence.....		15 00
June 18..	T. 50	Paid J. Boschken, hardware.....		10 80
June 18..	T. 51	Paid J. A. Belloli, barley.....		19 06
June 18..	T. 52	Paid Excelsior Wood Yard, wood.....		48 00
June 18..	T. 53	Paid Presho Bros., wood.....		66 00
June 18..	T. 54	Paid William Grey, repairs.....		22 50
June 18..	T. 55	Paid C. H. Allen, sundry bills.....		61 55
July 26..	A. 69	Paid San José Gas Co., gas six months.....		23 80
July 26..	A. 70	Paid Sunset Telephone Co., box rent six months.....		15 00
Aug. 28..	A. 71	Paid Farmers Union, supplies.....		1 25
Aug. 28..	A. 72	Paid S. C. V. M. & L. Co., lumber and mill work.....		21 40
Oct. 1..	A. 73	Paid Mrs. A. E. Bush, museum expenses.....		38 95
Oct. 1..	T. 56	Paid Ruth Royce, Secretary, miscellaneous expenses.....		47 15
Oct. 1..	T. 57	Paid National Bank D. O. Mills & Co., forwarding warrants.....		5 00
Oct. 1..	T. 58	Paid Bank of San José, exchange.....		7 81
Oct. 1..	T. 59	Paid C. H. Allen, exchange.....		9 70
		Balance of appropriation at close of thirty-ninth fiscal year.....		2 06
		Balance of tuition fund at close of thirty-ninth fiscal year.....		1,378 95
		Totals.....	\$45,100 35	\$45,100 35

SUMMARY OF ABOVE REPORT.

	Dr.	Cr.
Total income for thirty-ninth fiscal year.....	\$45,100 35	
Expended for salaries of teachers, Secretary, and Janitor.....		\$35,214 66
Expended for stationery.....		546 80
Expended for furniture and apparatus.....		190 73
Expended for fuel and gas.....		827 83
Expended for general supplies.....		246 93
Expended for repairs and improvements.....		196 68
Expended for books and periodicals.....		240 81
Expended for traveling expenses.....		521 80
Expended for insurance.....		750 00
Expended for iron fence and gates.....		200 80
Miscellaneous expenditures.....		476 06
Total for current expenses of school.....		\$39,413 10
Expended for payment of gardeners and other labor on grounds.....		\$2,705 75
Expended for fuel for engine, hay, and sundry supplies for grounds.....		797 33
Expended for water pipes and hose.....		523 92
Expended for setting engine, and repairs to engine and tools.....		162 14
Expended for plants, trees, and seed.....		117 10
Total for care and improvement of grounds.....		\$4,306 24
Total unexpended balance.....		1,381 01
Totals.....	\$45,100 35	\$45,100 35

REPORT OF TRUSTEES OF STATE NORMAL SCHOOLS.

Appropriation for Library of State Normal School, San José.

Date of Auditing.	No. of Voucher.		Dr.	Cr.
1887.		Appropriation.....	\$1,000 00	
Sept. 29..	1	Paid D. Appleton & Co., books		\$25 45
Sept. 29..	2	Paid Bancroft Bros. & Co., books.....		35 80
Sept. 29..	3	Paid Annie Stockton, agent, "Wonders of Universe".....		5 50
Oct. 27..	4	Paid John B. Alden, books		25 95
Nov. 28..	5	Paid G. W. Welch, books		691 41
Nov. 28..	6	Paid D. Lothrop & Co., books.....		37 31
1888.				
Jan. 24..	7	Paid G. W. Welch, books		13 55
May 24..	8	Paid Thos. Nelson & Son, books.....		15 68
May 24..	9	Paid The History Company, 4 vols. "Bancroft's History".....		22 00
May 24..	10	Paid The J. Dewing Company, "Great Cryptogram".....		7 00
May 24..	11	Paid The J. Dewing Company, "People's Encyclopedia".....		22 00
		Balance of appropriation at close of thirty-ninth fiscal year.....		98 35
		Totals	\$1,000 00	\$1,000 00

REPORT OF PRINCIPAL.

To the Board of Trustees of the State Normal School, at San José:

GENTLEMEN: We have just closed what has been, in many respects, the best year's work the Normal School has ever accomplished, since my connection with it. From year to year, for the last ten years, in my reports I have been obliged to call attention to the fact that the teaching force in the school was quite too small. This year, through your liberality, we have had teachers enough to do the work of the school well. The number, however, has not been greater than our attendance has justified. In a Normal School, where pupils should receive a great amount of training in expression, there should be, in my opinion, at least one teacher for every twenty-five pupils, as shown in the average enrollment.

I give below the statistics of this year, and, for comparison, of the next preceding year:

	1887-8.	1886-7.
Total enrollment.....	793	827
Distributed as follows:		
Senior Class.....	193	164
Middle Class.....	199	178
Junior Class.....	205	290
Training Department.....	196	
Preparatory.....		59
Training Department.....		136

The average enrollment for the year, in the Normal School proper, has been four hundred and ninety. For the instruction of these we have had sixteen regular and two special teachers, aggregating, say, seventeen teachers, or one teacher to a little more than twenty-eight pupils.

It is noticeable that the advanced classes have been relatively larger this year than last. This has been the constant tendency in the school for several years, showing that it holds its pupils, and that a larger number of those who enter remain until they graduate.

The falling off in the Junior Class of from two hundred and ninety to two hundred and five is partly due to the fact that the Board avowed the policy of graduating hereafter but one class each year; and instead of having, as is usual, one hundred and twenty to one hundred and thirty to examine at the opening of the winter term, but about eighty presented themselves.

I am glad to report that graduates of the school are constantly in demand, and that reports from those who are at work in the schools of the State are in the main satisfactory.

The small appropriation made for the beginning of an Industrial Department has enabled us to furnish a room with suitable wood-working tools, comprising two lathes, saws, planes, and other necessary appliances. We have neither room nor instructors enough to give the advantages of the department to all our pupils, but the results with those who have taken even a limited course has been satisfactory, and in some cases, really surprising.

I am not now prepared to recommend any addition to the department. Being entirely new, both to teachers and pupils, there has been some friction

in getting the different matters adjusted; but I trust these will all disappear as we become more accustomed to the work.

Of the desirability of giving some industrial training to our pupils there is no question. How to find the time for it in our already crowded course, and exactly how to conduct the department, are open questions.

The changes made by the Board at the joint meeting in the Course of Study, Terms, and Time of Graduation, are so great, that it will require the experience of a year or two to determine fully their effect. It is perhaps best to wait for this experience before expressing any opinion in reference to the subject.

Hoping and working for the best results, I am, very respectfully, your obedient servant,

CHAS. H. ALLEN, Principal.

TRUSTEES' REPORT, CALIFORNIA STATE NORMAL SCHOOL, LOS ANGELES.

To his Excellency R. W. WATERMAN:

SIR: We herewith submit for the State Normal School at Los Angeles, under our charge, the financial report of the thirty-ninth fiscal year, ending June 30, 1888; together with the report of the Principal of the school for the same year, as required by law.

We trust you will find upon examination of the financial report, that a due care and economy has been exercised in disbursing the funds intrusted by the State to our keeping.

Very respectfully submitted.

O. W. CHILDS,
President of Trustees.

IRA MORE, Secretary.

FINANCIAL REPORT

Of the California State Normal School at Los Angeles, for the Thirty-ninth Fiscal Year, ending June 30, 1888.

Date of Auditing.	No. of Voucher.		Dr.	Cr.
1887.		<i>Current Expense Account.</i>		
		To appropriation for current year.....	\$18,000 00	
July 31..	1	By Sunset Telephone Company, for July.....		\$5 00
July 31..	2	By Weinsbank & Knox, plumbing.....		57 90
July 31..	3	By Richardson & Son, blackboard material.....		18 78
July 31..	4	By F. H. Angell, slating blackboards.....		14 00
July 31..	5	By salaries of employes for July, 1887.....		1,166 65
July 31..	6	By Samuel J. Hinckley, Janitor, for July.....		50 00
Aug. 31..	9	By salaries of employes for August, 1887.....		1,216 65
Aug. 31..	10	By Los Angeles City Water Co., supply for July.....		1 50
Aug. 31..	11	By Sunset Telephone Company, August.....		5 00
Aug. 31..	12	By Richardson & Son, paints, varnishes, etc.....		31 55
Aug. 31..	13	By L. A. Furniture Company, teacher's desk.....		35 00
Aug. 31..	14	By C. C. Bonnell, repairing desks.....		101 50
Aug. 31..	15	By M. S. Whitcomb, hauling sand, etc.....		5 00
Sept. 30..	16	By salaries of employes for September.....		1,266 65
Sept. 30..	17	By L. A. Gas Company, supply for August.....		1 50
Sept. 30..	18	By Sunset Telephone Co., for September.....		5 00
Sept. 30..	19	By Los Angeles City Water, for August.....		2 25
Sept. 30..	20	By Phil. Hirschfeld & Co., for stationery.....		8 00
Sept. 30..	21	By H. Jevne & Co., for dusters.....		9 50
Sept. 30..	22	By W. C. Furrey, for Janitor's supplies.....		20 25
Sept. 30..	23	By Richardson & Son, paints and oil.....		11 00
Sept. 30..	24	By J. W. Queen & Co., microscope apparatus.....		16 94
Sept. 30..	26	By S. M. White, mileage to San José.....		96 00
Oct. 31..	27 to 39	By salaries of employes for October.....		1,296 65
Oct. 31..	40	By Sunset Telephone Company, for October.....		5 00
Oct. 31..	41	By Citizens Water Company, for September.....		6 50
Oct. 31..	42	By Los Angeles City Water Co., for September.....		6 75
Oct. 31..	43	By Los Angeles Gas Company, for September.....		2 70
Oct. 31..	44	By J. Dewing & Co., for school furniture.....		179 90
Oct. 31..	45	By Perry L. & M. Co., for plank walk.....		78 04
Nov. 30..	46	By salaries of employes for November.....		1,296 65
Nov. 30..	47	By Citizens Water Company, for October.....		10 60
Nov. 30..	48	By Los Angeles City Water Co., for October.....		6 75
Nov. 30..	49	By Los Angeles Gas Company, for October.....		6 30
Nov. 30..	50	By Henderson & Co., for fitting keys.....		9 90
Nov. 30..	51	By W. C. Furrey, hardware, etc.....		10 30
Nov. 30..	52	By Brown & Foster, hardware.....		3 05
Nov. 30..	53	By Sunset Telephone Company, for November.....		5 00
Nov. 30..	54	By F. W. Blanchard, tuning piano.....		10 00
Nov. 30..	55	By Van Horn, Mather & Frost, anatomical charts.....		52 00
Dec. 31..	57	By salaries for December, 1887.....		1,296 65
Dec. 31..	58	By Sunset Telephone Company, for December.....		5 00
Dec. 31..	59	By Los Angeles Gas Company, for November.....		4 20
Dec. 31..	60	By Citizens Water Company, for November.....		15 90
Dec. 31..	61	By Los Angeles City Water Co., for November.....		3 00
Dec. 31..	62	By Ira More, salary as Secretary to January 1.....		75 00
Dec. 31..	63	By Hirschfeld & Seldner, for stationery.....		47 25
Dec. 31..	64	By Antonin Sperl, for repairing fence.....		9 00
1888.				
Jan. 31..	65	By salaries for January, 1888.....		1,296 65
Jan. 31..	66	By W. S. Maxwell, for coal.....		73 25
Jan. 31..	67	By Los Angeles Gas Co., for December, 1887.....		6 00
Jan. 31..	68	By Los Angeles Gas Co., for July, 1887 (duplicate).....		4 20
Jan. 31..	69	By Sunset Telephone Co., for January, 1888.....		5 00
Jan. 31..	70	By Citizens Water Co., for December, 1887.....		16 80
Feb. 29..	75	By salaries for February, 1888.....		1,296 65
Feb. 29..	76	By W. S. Maxwell, for coal and wood.....		140 30
Feb. 29..	77	By Sunset Telephone Company, for February.....		5 00
Feb. 29..	78	By Los Angeles Gas Company, for January.....		5 40
Feb. 29..	79	By Citizens Water Company, for January.....		17 25
Feb. 29..	80	By L. B. Lawson, for lettering diplomas.....		6 00
Feb. 29..	81	By W. H. A. Nahl, for blank diplomas.....		30 00

FINANCIAL REPORT—Continued.

Date of Auditing.	No. of Voucher.		Dr.	Cr.
Feb. 29..	82	By D. Knox, for plumbing repairs		\$5 00
Feb. 29..	83	By Adolf Ekstein, for chemicals		46 10
Feb. 29..	84	By Ulrich Knoch, for printing programmes		15 00
Feb. 29..	85	By H. C. Wyatt, for rent of Opera House		25 00
Mar. 31..	99	By salaries for March, 1888		1,296 65
Mar. 31..	100	By Phil. Hirschfeld, for stationery		49 25
Mar. 31..	101	By Los Angeles Gas Company, for February		7 20
Mar. 31..	102	By Sunset Telephone Company, for March		5 00
April 30..	105	By Chas. H. Allen, salary, Secretary joint Normal Board		20 00
April 30..	106	By Los Angeles Gas Co., for March, 1888		3 30
April 30..	107	By Citizens Water Co., for March, 1888		11 75
April 30..	108	By Sunset Telephone Co., for April		6 25
April 30..	109	By salaries for April, 1888		1,296 65
May 31..	111	By salaries for May, 1888		1,296 65
May 31..	112	By Z. L. Parmelee, for glass tubes		1 85
May 31..	113	By Phil. Hirschfeld & Co., for stationery		24 73
May 31..	114	By Merrill & Cook, for ruled paper		42 00
May 31..	115	By Citizens Water Co., for April		5 45
May 31..	116	By Sunset Telephone Co., for May		6 05
May 31..	117	By Los Angeles City Water Co., for April		4 50
May 31..	118	By Fannie L. Matson, for number frame		30 00
May 31..	119	By Los Angeles Gas Co., for April		3 60
May 31..	120	By A. S. Davidson, for mileage		12 00
May 31..	121	By Clara S. Foltz, for mileage		30 00
June 30..	123	By salaries for June, 1888		1,296 65
June 30..	124	By Home Insurance Co., for premiums on \$8,000		144 00
June 30..	125, 126	By Jas. W. Queen, for skeleton and apparatus		97 62
June 30..	127	By Ira More, Secretary to Trustees, salary to June 30, 1888		75 00
June 30..	128	By Los Angeles Gas Co., for May and June		7 20
June 30..	129	By Sunset Telephone Co., for June		5 25
June 30..	130	By L. B. Lawson, for lettering diplomas		10 00
June 30..	131	By Wells, Fargo & Co., expressage on package		11 25
June 30..	133	By Citizens Water Co., for May and June		20 55
June 30..	132	By Los Angeles City Water Co., for May and June		9 00
June 30..	134	By Adolf Ekstein, for chemicals		2 60
June 30..	135	By Phil. Hirschfeld & Co., stationery		37 00
June 30..	136	By W. C. Furrey, for hardware, etc.		54 55
June 30..	137	By Richardson & Son, paints and oils		52 00
June 30..	138	By Times-Mirror Co., programmes		11 25
June 30..	140	By J. Kuhrt, rent of Turner Hall		27 00
June 30..	141	By C. W. Hodson, for educational periodicals		15 00
June 30..	142	By California Central Railroad, for freight		6 20
June 30..	143	By Powell, Haskell & Co., moving piano		7 00
		By balance		376 69
			\$18,000 00	\$18,000 00

Library and Museum—Thirty-ninth Fiscal Year.

Date of Auditing.	No. of Voucher.		Dr.	Cr.
1887.				
July 1..	-----	To appropriation for thirty-ninth fiscal year, ending June 30, 1888.	\$1,000 00	
Dec. 1..	67½	By Ginn & Co., for books for library		\$161 02
1888.				
Jan. 31..	73	By Perry L. & M. Co., for library cases		280 00
Jan. 31..	74	By History Co., for 3 vols. Bancroft's History ..		16 50
Feb. 29..	86	By Thomas J. Neuner, for binding		25 25
Feb. 29..	89, 90, 98	By Merrill & Cook, for books for library		513 16
June 30..	-----	By balance		4 07
		Totals	\$1,000 00	\$1,000 00

Care of Grounds.

Date of Auditing.	No. of Voucher.		Dr.	Cr.
1887.				
July 1..	-----	To appropriation for thirty-ninth fiscal year ...	\$750 00	
July 31..	7	By John W. Hoyt, for work in July		\$47 00
Aug. 31..	8	By John W. Hoyt, for work in August		53 00
Sept. 30..	25	By John W. Hoyt, for work in September		52 00
Oct. 31..	46½	By John W. Hoyt, for work in October		52 00
Nov. 30..	56	By John W. Hoyt, for work in November		48 00
Dec. 31..	65½	By John W. Hoyt, for work in December		50 00
Dec. 31..	66½	By M. S. Whitcomb, with team		40 00
1888.				
Jan. 31..	71	By William Capple, work in January, 1888		44 00
Jan. 31..	72	By F. McCracken, for stakes and frames		86 00
Feb. 29..	87	By H. Jevne, for materials for tree wash		12 25
Feb. 29..	88	By William Capple, for work in February		50 00
Mar. 31..	103	By William Capple, for work in March		54 00
Mar. 31..	104	By Occidental Nursery, for trees and shrubs ..		19 20
April 30..	110	By William Capple, for work in April		50 00
May 31..	122	By William Capple, for work in May		52 00
June 30..	139	By William Capple, for work in June		40 50
June 30..	-----	By balance		05
		Totals	\$750 00	\$750 00

THIRTY-NINTH FISCAL YEAR, ENDING JUNE 30, 1888.

Summary of Petty Cash Account.

	Dr.	Cr.
To cash on hand	\$84 29	
To rent of room to United States Observatory	72 00	
To water furnished United States Observatory	24 00	
To coal furnished Model School and United States Observatory	55 75	
To amount received for duplicate library book	3 20	
By amount paid for express charges		\$60 35
By amount paid for freight and cartage		15 35
By amount paid for postage		26 25
By amount paid for 30 vols. "Art Treasures of Italy"		30 00
By amount paid for books		17 80
By amount paid for advertising		12 85
By amount paid for work		43 33
By amount paid for sundry small bills		25 75
By balance		7 56
	\$239 24	\$239 24

SUMMARY FOR THIRTY-NINTH FISCAL YEAR.

	Dr.	Cr.
<i>Current Expense.</i>		
To receipts	\$18,000 00	
By disbursements		\$17,623 31
By balance		376 69
	\$18,000 00	\$18,000 00
<i>Library and Museum.</i>		
To receipts	\$1,000 00	
By disbursements		\$995 93
By balance		4 07
	\$1,000 00	\$1,000 00
<i>Care of Grounds.</i>		
To receipts	\$750 00	
By disbursements		\$749 95
By balance		05
	\$750 00	\$750 00
<i>Petty Cash.</i>		
To receipts	\$239 24	
By disbursements		\$231 68
By balance		7 56
	\$239 24	\$239 24

PRINCIPAL'S REPORT.

To the Board of Trustees of the California State Normal School at Los Angeles:

GENTLEMEN: The sixth year since the organization of this school is now closing and has been fairly prosperous. We have been hampered somewhat in growth by the great difficulty in procuring rooms and board for the students; but as the rapid building of the past year seems to approach the needs of the people, we apprehend less difficulty in the future.

The following table shows the aggregate attendance each year since the organization of the school, September, 1882:

1882-83	126
1883-84	187
1884-85	231
1885-86	252
1886-87	278
1887-88	279

Of this number every student pledges his intention to teach in the public schools of this State; no others are received.

The average attendance this year is larger than last year, though the aggregate shows but slight increase. In comparing the size of this school with other public normal schools, the last data obtainable are in 1885-86. In that year there were one hundred and seventeen public normal schools in the United States, with an aggregate attendance of twenty-three thousand normal students, making an average of one hundred and ninety-seven at each school. Our attendance that year was two hundred and fifty-two, making us considerably larger than the average. Our increase must have since been more rapid than in the older States; so that we may safely assert that this school is at the present time decidedly larger than the average public normal school in the United States.

We present at this time a class of twenty-two for graduation, making, with a class of thirteen at the middle of the year, thirty-five graduates for the school year. The entire number of graduates from the school is one hundred and eighty-three—the first class graduating in 1884. We have kept a record of this first class as a sample of the work done by the students after leaving the Normal School. They have been out four years, and though some have fallen out by the way, as must be expected, the average length of time taught is three and one fourth years. Experience of older normal schools shows the average length of time taught by graduates to be about ten years. From present appearances, our classes thus far sent out will equal or exceed that time.

As before stated, all who enter the Normal School pledge an intention to fit themselves for teaching, and to teach in the public schools. All, or nearly all, are undoubtedly sincere in making this pledge, for there is little to attract one in the rugged work of the school, unless he needs the discipline for teaching. Yet there are many who do not graduate; some find they have attempted more than their strength will allow; some are not pro-

moted regularly, and become discouraged; others are found by natural aptitudes unfitted for the teacher's vocation, and are advised to withdraw; some move away and join themselves to other schools; and possibly some, in this day of sudden riches, find themselves beyond the prospect of earning their own livelihood, and desire a different culture. Those also must be mentioned who join the school for a brief period to gain such benefit as they may, but win their certificates in the county examinations. But a careful numbering of the admissions and the graduations shows that an unusually large number of those who enter, thirty-seven per cent in all, take the diploma of the school.

The library having outgrown its accommodations, new cases were put in about Christmas time, and some seven hundred volumes added to the list. The Librarians, Misses Dunn and Merritt, of the Faculty, have spent much time in rearranging and cataloguing the collection, and their catalogue, which is now in press, will add much to the facilities of using the books to the best advantage, and with the least loss of time.

A great press of other matters has prevented giving the attention to the museum which it deserves. The collection is already a creditable one, and time must be taken the coming school year to insure its increase on a scale commensurate with the needs of this portion of the State.

The addition of the fourth year to the course of study makes necessary some apparatus not before needed; especially a portable telescope for class use, without which the study of the heavens is comparatively uninteresting. A four-inch object glass, if perfect, makes an instrument excellently adapted to school purposes, indeed better for such use than a larger glass. I hope you will see fit to order the purchase of such an instrument, which is of quite moderate cost.

It is to be hoped that many graduates will avail themselves of the advantages of the Post Graduate Course, and thus increase their power of usefulness to the State.

Very respectfully submitted.

IRA MORE.

TESTIMONY

TAKEN BEFORE

JOINT SPECIAL COMMITTEES FROM ASSEMBLY AND SENATE

APPOINTED TO INVESTIGATE CERTAIN

Charges in Connection with the Erection of the Branch
State Normal School, Chico, Butte County.

TESTIMONY.

The special committees appointed from the Senate and Assembly to investigate certain charges made against the Board of Trustees and Superintendent having in charge the construction of the State Normal School, located at Chico, Butte County, in regard to the erection of said building, met February 16, 1889, ten o'clock A. M., at the office of F. C. Lusk, Esq., when the following proceedings were had:

Present: Senator Campbell, Assemblymen Dobbin, Burwell, Davis, Maher, and Porter.

Senator Campbell was unanimously elected Chairman of the joint committee.

The Chairman swore L. J. Gillin to act as official stenographer of the joint committee, to correctly report and transcribe the testimony taken before said committee.

F. C. LUSK.

Sworn.

THE WITNESS: I would like to make a full statement of facts in this matter relating to the charges made, and then the committee can ask any questions they may desire. Myself, General Bidwell, A. H. Crew, L. H. McIntosh, and T. P. Hendricks were appointed Trustees of this Branch State Normal School. The erection of the building really came under the supervision of the Board of Trustees of the Normal School at San José, but they did not desire to undertake the trouble of superintending its erection, as it would necessitate the annoyance of their coming away up here, and so this Board was appointed to take the matter under their personal supervision, they to act as the San José Board's executive agents for the purpose of erecting this building. All bills, however, go to the Board at San José, who are legally the Board superintending the construction of the school.

Regarding the cost of the building: When we came to consult with Professor Allen, who was the superintendent of the building of the State Normal School at Los Angeles, we found that a building adapted to the purposes ought to be of a certain size; that it should contain a certain number of rooms, they being of a certain size; that there should be many things in connection with the building of a certain size and quality, to erect a good building for the purpose. Of course the labor having to be done by the days work, it could not be done as cheaply as otherwise. We employed Percy & Hamilton, of San Francisco, as architects, and desired them to draw plans and specifications of a building suitable for the purpose intended. They did so, and also employed Mr. Kent of San Francisco to make the estimates of the cost of the erection of the building, and we found that by no possibility could we construct a building for fifty thousand dollars, the price allowed for its building, that would answer the purpose. The citizens of Chico, taking an active interest in the matter, subscribed ten thousand dollars towards the erection of this Normal School. General Bidwell had donated eight acres of land from his ranch,

worth a considerable amount of money, for the site of the building. This ten thousand dollars donated by the citizens was in the hands of the Board to use as they saw proper. When we went to San José with our plans, it was argued by Mr. Kent and the architect that the building could be put up inside of sixty thousand dollars, so the Board adopted the plan in view of that estimate of cost. Well, when we came to get along with the building of the school we found some things came a good deal higher than we had expected they would. We found, for instance, that we could not get brick for the purpose required at the price we expected to, because brick heretofore had always been made by Chinamen in this part of the State; they were the only ones who knew how to make brick, and we were compelled to hire white men and train them in the trade, and teach them how to make the brick. We had considerable trouble too, about the making of the brick. Well, that trouble about the brick made our expense in that direction a couple of thousand dollars more than we had expected, and then several things transpired in the course of the erection of the building to run up the cost of the building a great deal higher than we had ever expected it would amount to. We started in to erect this Normal School as we would a private dwelling house—a house of our own—to build it at the least possible expense to the State and at the same time to make a good, substantial building, and have everything first-class about the school; that everything connected with the school should be of a good character; the workmanship should be good, and at the same time we should get everything as cheaply as possible, as we would if we were to erect a house for ourselves—as economically as we possibly could.

Now, in reference to low prices for wages being paid workmen: When we first started the erection of the school, and before we had a superintendent of construction, there was some work necessary to be done to get the ground donated by General Bidwell for a site, cleared off and in order for the work. There were some trees to be taken out, and General Bidwell wanted to superintend that part of the work, as he knew just what had to be done and how it ought to be done; so we permitted him to take charge of that portion of the work. We knew nothing whatever as to the wages he was paying—the prices he paid for labor. The fact is though, I suppose, that he just took the men from his own ranch and just transferred them to the ground where the work was to be done; had them do the work and paid them just what he had been paying them on the ranch. I understand objections have been made to the prices paid for labor. I don't understand; I don't know the sum that was paid now from memory, to the men working for him at that time. I suppose it was a dollar and a half a day; anyway, it was the usual price paid for labor—the usual price that General Bidwell paid his employés, and that is the history of how it came that those extremely small wages, as I have heard them called, were paid. It was at the beginning of the work, and before we had a superintendent. In fact, that work was not on the building at all; it was before the building was commenced—getting the ground ready.

After the building was started we found a great deal of trouble getting bricklayers to do the work. Men who did other work, I think, were not particularly scarce, but bricklayers were. We went to San Francisco and could not get bricklayers; we went to Sacramento and could not get them, and we were obliged to get along as best as we might with bricklayers who lived in this vicinity, and who lived in this portion of the State.

We held almost daily sessions of the Board of Trustees during the erection of the building; not every day, but frequently every day for a week and sometimes three or four times a week. At none of our meetings did

any man employed on the building ever complain or appear before the Board with any charges or complaints, or to express any dissatisfaction regarding the wages paid or the time of working. Nor did we ever hear any complaint about the conduct or treatment of Mr. Bryant, the Superintendent. No complaint was ever made to us by any man working on the building. Then at the outset of the work there came up the question of how many—about eight hours work a day. The men who were working on the building mainly lived around here, were in the habit of working nine, nine and a half, and ten hours a day, according to the season of the year. All the carpenters and all the other mechanics who were employed on that building had been used to working that number of hours. And I had a talk, or rather had the Superintendent talk with the men as to whether they would rather work eight hours or work the usual number of hours and receive the usual pay—to work the number of hours they had been accustomed to around here. They all agreed to work the usual number of hours that they worked around here.

MR. CAMPBELL: They would rather work ten than eight hours for the same pay? Answer—I didn't say that. I said, and receive the same pay they had received around here. And if they worked, that is, suppose they were paid a certain price per hour, it would amount to more for them by working the longer number of hours. It would be better for them to work nine or nine and a half or ten hours than eight at that rate. If they were working here ten hours a day for three dollars per day, why paid at the rate of thirty cents an hour would give them just the same rate of wages that they had been accustomed to. They were satisfied and willing to work for a sum per hour which would give them, which would amount to, a regular day's pay around here at the same number of hours. They were perfectly satisfied with that arrangement, and there was no complaint made as to the hours of labor, and it was understood as being satisfactory that the work should be done in that way. The work went right on in that way and nothing further was ever heard by the Board about it, and it was never called to the Board's attention if there was any complaint regarding the number of hours worked—no complaint made to the Board whatever until the committee from the Legislature at Sacramento came here, and then the committee spoke of the fact of the men being worked ten hours a day. The men, as far as I know, were perfectly satisfied with the hours they were working and pay they were receiving until the committee from the Legislature came here from Sacramento. It was then stated by several members of that committee that they thought the men should have worked a less number of hours or else should have received more pay, one or the other. And we stated that if that was the proper course it was something of which we had not been advised; and if we had done anything wrong in the matter we had done so innocently, and that no complaint had ever been made to us about it; if there was any complaint in regard to it, it was not here; but that if the committee thought that was the proper course we would certainly do what the committee thought right. But we told them we could not finish the building if we worked the men but eight hours a day and gave them the same wages they were then receiving; that it would require twenty-five hundred dollars more to finish the building on account of paying a larger price for the work than we had been doing; and they said they would rather that the work would go on that way and that they would see that the additional money was appropriated by the Legislature; they would rather that the work was properly done. Of course we were entirely satisfied with that, so long as we were assured of the appropriation. Whatever we did in the matter of employing

men and as regards the prices paid for their labor, we did in entirely good faith and entirely innocent of doing wrong, deeming that we were acting for the best interests of the State and that we were expending the State's money properly and judiciously.

MR. CAMPBELL: What is your profession? A. Lawyer. I will state right here that I went on this Board of Trustees with the utmost reluctance. I only did so at the earnest solicitation of Governor Bartlett, who desired me to go on the Board at a personal interview. It has been a great annoyance to me. It has taken a great deal of my time and has given me a great deal of trouble, without compensation.

MR. CAMPBELL: As a lawyer, you must surely be aware of the existence of a section in the Constitution of the State which makes a day's labor on all public works? A. It is expressed in the bill appropriating—erecting a branch school here, that the building should be put up by day's work.

Q. Would not this section I refer to govern the whole thing? This is article twenty of the Constitution of the State of California, and at section seventeen we find the words: "Eight hours shall constitute a legal day's work on all public works." That is as the Constitution reads, and I believe that is the law as it stands now. It says in the Political Code: "All work done upon public buildings of this State must be done under the supervision of a superintendent or State officer or officers having charge of the works, and all labor employed on such buildings, whether skilled or unskilled, must be employed by the day, and no work upon any of such buildings must be done by contract." "All materials to be used on all public buildings must be furnished by contract, and in accordance with the plans and specifications therefor." "Eight hours shall constitute a legal day's work in all cases where the same is performed under the authority of any law of this State, or under the direction, control, or by the authority of any officer of this State acting in his official capacity or under the direction, control, or by the authority of any municipal corporation within this State, or of any officer thereof acting as such, and a stipulation to that effect be made a part of all contracts to which the State or any municipal corporation therein is a party." Now, Mr. Lusk, did you know that that law existed at the time? A. I don't suppose I ever read and didn't know it existed until this time. I knew, however, generally that eight hours was regarded as a legal day's work.

Q. At what time did you become aware of that fact? A. Before the selection of Chico as the site.

Q. You knew that at that time? A. Certainly. The law was very frequently read. It is a short law.

Q. Is there any difference in the magnitude of one law from another? A. I suppose all laws are of equal dignity. All laws should be obeyed.

Q. You think all laws should be obeyed. This law was then not obeyed? A. I think it was obeyed.

Q. You think it was obeyed? A. I don't understand that there is any law fixing the price per day for any labor on State work or any other work.

Q. We don't pretend that there is. We are only laymen. A. Of course, if we employed men at one dollar a day, then we would certainly be under the letter of the law.

Q. The law says that eight hours is a legal day's work. Now, then, you say that all these men wanted to be worked the usual number of hours they had been working? A. I understood it so.

Q. Then you state that they preferred to work ten hours rather than eight. Again, you state that they wanted to work by the hour, if by

so doing they could get a full day's pay? A. A full day's pay being the amount which they usually worked for around here; in other words, laborers that worked on this building, if they received three dollars a day on work they did in this vicinity, they were willing to work for the State for the same wages.

Q. No laborer ever made complaint as to the manner of treatment or the number of hours he was working? A. Never made any complaint to the Board in my presence.

Q. How then did it come to your knowledge that they would prefer to work ten than eight hours if they did not make some complaint? A. Because, immediately after the erection—the construction—of the building was started, the Superintendent saw the men and reported that they preferred to work the usual number of hours that they were in the habit of working around here, and were willing to work at a price per hour that would amount to the same wages that they had been accustomed to receive when working around here; and that seemed to be satisfactory to both the Board and the men. We thought the law was acted up to.

Q. Well, provided that the law providing for the erection of the building and appointing the officers to superintend and manage its erection was obeyed, should not the law providing for the number of hours that laborers were to work on all public buildings—should not that law be maintained as well as the other? A. If any law was not obeyed it certainly ought to have been obeyed. Every law should be observed by every citizen, undoubtedly.

Q. Then you will admit, or will you admit, that the law governing the hours of labor, providing for the number of hours to be worked on buildings of the State, was violated in the construction of this building? A. I do not think it was violated, but a number of the committee that was here from the Legislature—that is, I don't think it was violated, either in substance or in spirit—but some of the members of the committee thought it was violated while other members thought it was not.

Q. Well, will you give us your reasons why you think it was not violated? A. Yes, sir. Because the men we employed on this building were in the—we had only a small amount of money; we wanted to make it go as far as possible, and the men that we employed in the construction of the building all, or nearly all of them, lived around here—were almost exclusively citizens of this town and interested in the building, and they were perfectly satisfied and willing to work, as stated to us, ten hours a day at such a price per hour as amounted to the same wages that they had been in the habit of receiving for a day's work on work in town. I don't know that I make myself clear, but I am simply stating what I have stated in substance two or three times before.

Q. In law, can you waive the right of others? A. Well, that is rather an abstract question. There are many legal rights which may be waived. Of course a person cannot waive the rights of other persons unless he has the authority to do it. He can waive his own rights, but I don't think he has the power to waive the rights of others without their permission and authority.

Q. You say that you did all this in the interest of the State, of which I have not the slightest doubt, and the committee does not attempt to question that fact; but, in the interest of economy, do you think you have taken away from any one employed on the building any of the rights which belonged to him, allowed to them by law? Do you think you have done so? A. Certainly not.

Q. Well, in this case has it been done? A. I claim not. In my view of the matter, I claim it has not been done.

Q. Did you not work them by the hour for ten hours a day? A. Well, whether they made their time out by the day or hour I do not know. I presume it was made out by the day. But when this matter was discussed they stated they were willing to work at a certain price per hour, so long as that price would allow them to make their usual wages. If a carpenter that we employed, living here in town, and who had received as a usual day's pay three dollars, and work for that from nine to ten hours a day, according to the season of the year, he was satisfied to work for us on that building at a price per hour and the usual number of hours per day that he was in the habit of working around here. That would pay him the same rate of wages per day as that to which he had been accustomed. He was perfectly satisfied to do so. We were informed that it was customary to work men by the hour. We did not know that we were —

Q. [Interrupting.] When was that brought to your notice that it was proper to work men by the hour on public buildings, if you will tell us? A. Well, we were informed that the usual way of working on buildings was to work by the hour.

Q. Will you be kind enough to give us the name of any witness or person who told you that it was the usual custom to work by the hour on public buildings—any one person who told you that? A. I could not, but I know that was the discussion that men had worked eight hours; had worked a larger number of hours than eight on public buildings, and had been paid by the hour.

Q. Well, if you will give me the name of any person who told you that—tell me any building upon which that was done since 1867? A. I could not do that.

Q. You don't know then of your own knowledge? A. I do not.

Q. You simply know from hearsay. Can you give me the name of any reliable or responsible person who says that such is the fact? A. That was the discussion. I cannot give the name of any particular person.

MR. DAVIS: In the meeting of the Committee on Public Buildings which met here—perhaps Mr. Lusk has forgotten it, but both Superintendent Hoitt and Mr. Brierly stated in this room that the Branch Normal School at Los Angeles was built and paid for by the hour. Do you remember that, Mr. Lusk? A. I remember that now, but I had forgotten it at the time Mr. Campbell asked me. And I had heard similar statements made by others, but as to who made them I cannot now remember. I do not remember the buildings mentioned either. I presume I may have heard those statements made by our architect and by Mr. Kent and Professor Allen, but I couldn't definitely state who they were; and I think I have heard of similar cases, where men have worked by the hour on buildings—and a good many buildings outside of State work—that eight hours constituted a day's labor, a legal day's work. Of course in this country everybody works a greater number of hours; everybody works more than eight hours a day in almost every employment. We expressed to the committee which was here that if we were not doing what they thought was right, and they thought the work should be done differently regarding the number of hours, that we were perfectly willing to do as they thought right.

Q. About what was the highest day's payroll on the works, merely to get at an estimate? A. We have all the payrolls here. Well, the highest week's payroll was from \$900 to \$1,100. I suppose \$150 would be the highest day's pay. Of course the payroll was sometimes much lower than

that. There were some days when the heat was so excessive that the men did not work—would not work all the day.

Q. About \$150 would be the highest day's pay? A. Yes, sir.

MR. DOBBIN: Those laborers you speak of as having been taken from General Bidwell's ranch, they were taken from the ranch to work on the building when labor was scarce? A. No; you did not understand me correctly. I didn't say they were taken to do that work because labor was scarce. I said before the building was—before the erection of the building was commenced there was some work to be done on the grounds—preparing the grounds for the foundation of the building. We did not have a Superintendent then, and General Bidwell offered to superintend the work and do it for us, and we permitted him to do so for us. He wanted to take out the trees and see that it was done properly—the site of this building was an orchard, and the trees had to be taken out, and the roots, in order to make clear ground for the building. General Bidwell gave this orchard site for the purpose, and he said that the trees had to be taken out very deep, and that the roots had to be removed very thoroughly from the ground. I suppose he just took his men from his ranch—I don't know that—but I suppose he simply took the men he had employed on his ranch and put them at work on this ground, on the grubbing of those trees, and he paid them, I suppose, just what he was paying for labor of that character on his own ranch.

Q. Do you know of any of those men who were working as laborers, taken from General Bidwell's ranch; do you know of them being employed on the building as skilled mechanics, when in fact they were only laborers and not able to do skilled work? What I mean by skilled mechanics is carpenter work or lathing work? A. That question I am entirely unable to answer.

Q. You do not know of that fact? A. No, sir; I do not know that to be a fact. The employment of the men on that building was principally left to the Superintendent, and perhaps he employed men who were not mechanics. I certainly do not know. I saw that in the papers, but I never heard any complaint of that kind from the mechanics around here who were employed on the building. That is the payroll for the week ending the sixth of October, 1888. Here is the payroll of October—October, 1887; one of General Bidwell's payrolls for that work which I mentioned, made out in General Bidwell's own handwriting. Part of the men received \$1 25 a day, some \$1 50, and some two or three \$1 75. I presume the men who received \$1 75 were wagoners. There are two of those payrolls.

MR. CAMPBELL: This is the complete payroll? A. For one week. There are only two of these payrolls of General Bidwell's in which men appear at \$1 50 and \$1 75 per day. I was referring to these two payrolls in answer to the question of Mr. Dobbin.

Q. Who is the Superintendent? A. This gentleman here—Mr. Bryan. These two payrolls of General Bidwell's at which men appear at \$1 50 and \$1 75 per day, amount to \$54 50 and \$85 65; and that covers the work which I speak of that General Bidwell did in preparing the grounds.

Q. Is this the complete payroll of that week [showing]? A. I do not know that these men came from General Bidwell's ranch, but that was the work done before we had a Superintendent. This was before the erection of the building was commenced, in October, 1887.

MR. DOBBIN: This was before the building was in course of construction at all? A. In preparing the ground for the building. The site of the building was covered with trees, which had to be taken out.

MR. CAMPBELL: Were there not men employed for less wages than appears on this payroll? I am simply referring to two documents which I saw at the Controller's office. On that payroll there were some men got as low as 86½ cents per day. There were others who got \$1 a day; others, \$1 12; others, \$1 50; others, \$1 75. A. The lowest that has ever been paid is \$1 50, and that is on those two payrolls of work done by General Bidwell. On Mr. Bryan's payrolls it has very seldom, if ever, been lower than \$2.

Q. I am making a copy of a payroll I saw in the Controller's office in my mind. I shall certainly get a copy of the document I mention as having seen in the Controller's office. A. It might have been for half a day's work. I don't think any man got as low wages. Permit me to make an explanation. When we first commenced work on the building for a short time some of the common laborers were paid \$1 50 a day, but when the matter was called to the attention of the Board we at once raised their wages to 20 cents an hour.

Q. Well, you have here another item referring work done in a brick yard? A. That was for some brick made at Anderson.

Q. I asked you if this was a complete payroll? A. Oh, no. We made some brick at Anderson: there was a payroll for that. If you desire to see that it can be procured. We employed a man at Anderson to make a kiln of brick, by the name of Steven Roycroff. This is the payroll you refer to. When we came to consider the question of making brick we found that we encountered a great deal of difficulty. Brick had always been made about here by Chinamen. The white men who took contracts to make brick for building purposes always had their work done by Chinamen, and they said they did not care to take a contract to furnish the brick for the building, because they said they would have to train white men to do the work—teach them how to make brick—and they would consequently lose money on the contract. We employed Mr. Steven Roycroff to make us some brick at Anderson. He made the brick and they were delivered to us. We found that they were not very satisfactory, however, and we did not continue the brickmaking at Anderson. We knew nothing about how he was to pay the men for the making of those brick, nor what it was to cost him for making them. When he got through he turned in a payroll for the making of that brick, and in that payroll appears that men (I suppose that was the one you referred to, Mr. Campbell)—there appears on that payroll one man who received \$1 12 per day for three days, and two or three men who received \$1 a day for three days, and it also states in that payroll, "one man at 62½ cents," but whether that was for half a day or a day I don't know. I don't know what that was for. We paid this money as per the payroll to Mr. Roycroff, but in reference to the prices, we had nothing to do with them. Mr. Roycroff engaged the men to make the brick for him, and also paid them himself. I presume this 62½ cents, I presume that was for a half day's work.

MR. CAMPBELL: No: it simply says here "62½ cts.," with nothing to show whether it was for a day or not. I want to ask another question. In addition to this pay, did these men get board in addition to this compensation for a day's pay, or did they pay for their boarding out of this amount? A. That is something I cannot tell you. Mr. Roycroff, who made that kiln of brick at Anderson, paid for the board of those men he had working for him there, \$23 30, and we paid that in addition to the price paid for days' labor.

Q. In addition to that? A. Yes, sir.

Q. He charged you how much a day? A. For his own services?

Q. No, for the board. A. Well, it is in here by the gross. This man made a kiln of brick for us, some eighty miles from here, at Anderson, which is in Shasta County. This bill was for his making that kiln of brick. He furnished us those bills of the price he paid for the labor of the men engaged in the work, and the price he paid for their board, \$123, in addition to the sum for labor on the payroll. We had nothing whatever to do with fixing the sum that Mr. Roycroff should pay the men for working on the brick in Shasta County, except to approve the payroll after it came to us.

Q. You had nothing to do with that? A. Nothing to do with that. This Mr. Roycroff resided at this Town of Anderson, Shasta County, and he undertook to make us a kiln of brick for a sample, and we were to pay him all costs connected with the making of it, and when he got through and delivered the brick, he also presented these bills, and we paid him.

Q. He charges 60 cents a day for board. I believe that statement is in the Controller's office. A. Well, possibly it amounts to that—\$123 30. This Mr. Roycroff made this kiln of brick and employed the men to help him make it, furnished all the materials, and at the conclusion delivered us the brick and rendered us his bills which are the ones now before the committee. The one I have in my hand is one for material—digging well, and wood for making brick, and so forth. But the making of that one kiln of brick proved that the making of brick at Anderson and shipped here by railroad from Anderson was not a success, cost too much money, and we stopped it. They made no more after that. Here is another one of Mr. Roycroff's bills, a payroll containing men from a \$1 50 to \$5 a day. The history of it was that General Bidwell thought brick could be made up there and shipped here that would do well for the erection of the building, and we authorized him to make this contract with Mr. Roycroff, and he did so. It is some time since and I have forgotten the details. This making of the brick at Anderson was simply a contract with Mr. Roycroff for which he was to receive a certain compensation for his labor. I think he was to employ all the men and pay the expenses and do the whole work and fix their compensation himself. Here is another bill, \$64 80, for the board of men, also in connection with that kiln of brick. And here is another one of Roycroff's payrolls, in which men are paid at the rate of from a \$1 50 to \$3 a day—none lower than \$1 50. Here is the item to which you refer, Senator Campbell: "Board of William Youbank, while on the burn, five days, at 60 cents, \$3; board of John Mackey, while on the burn, five days, at 60 cents, \$3."

Q. What class of work did you employ on the building lately; what did the men getting \$2 50 a day do? A. Well, we will ask the Superintendent about that. [The witness reads Section 3235 of the Political Code, as follows: "No supplies of any kind or character for the benefit of the State, or to be paid for by any moneys appropriated or to be appropriated by the State, employed or grown in this State, which are in whole or in part the product of Mongolian labor, shall be purchased by officials for the State having the control of any public institution under the control of the State, or of any county, city and county, city, or town thereof."] We exercised the utmost care to comply with the provisions of that section, and I have detailed a portion of it in regard to that brick.

MR. CAMPBELL: Do you know whether there were any Mongolians employed in connection with the manufacture of any articles which went towards the construction of this building? A. Not that I know of. We strictly endeavored to comply with that section always. We were ever careful to comply with its provisions.

Q. May I ask you why the other section of the Political Code should not have been observed equally as rigidly as that? A. One section should be observed as rigidly as another; I have no doubt of that. I would like to make a statement in reference to the price of lumber.

Q. You had better leave that to the lumberman. A. I will say, in reference to the price of lumber, that we advertised for bids to furnish lumber, and we received answers from several parties, and we purchased the lumber of the lowest bidder, and that it was regarded as a very cheap bid and was below the price at which they were selling the same class of lumber in this town, and our Superintendent and our Architect both expressed surprise that the lumber was put in at such a low figure.

Q. What prices did you pay for lumber, Mr. Lusk? A. Of course the prices varied that we paid for the lumber.

MR. DOBBIN: You have no knowledge, then, of any brick being manufactured, wholly or in part, by Chinese, and which was used in the construction of the building—any brick made by Chinese? A. No, sir; I have none. We supposed that we rigidly complied with that section. We always endeavored and intended to do so.

Q. Do you know anything about some brick being made by white men and loaded in with that which came from a Chinese brickyard? A. I do not. We made a contract for the brick, and stipulated that it should be made by white labor, and we supposed that it was made by white labor. We never heard anything to the contrary. In fact, it has always been so stated.

MR. DAVIS: This lumber company employed Chinese of which you purchased the lumber? A. To some extent, probably. I do not know to what extent.

Q. Indirectly. Of course, you do not know whether they did or not; you do not know of your own knowledge whether they employed Chinese in the manufacture of the lumber, either in whole or in part? A. I do not know whether it was manufactured by Chinese in whole or in part. I do not think it was manufactured by Chinese.

MR. DOBBIN: Do you know what was the prevailing rate per thousand of lumber used on the building? A. I have sent for papers which will tell. I will state that we let it by contract to the lowest bidder, and we got it at a very low figure. There was some timber used in the construction of the school we had to get from Oregon. It couldn't be got here. We got it from San Francisco, but it came from Oregon.

A. J. BRYAN.

Sworn.

Examined by MR. LUSK: I would like you to state the prices of lumber and the character of lumber used on this building, of the lumber bought here. You need not state that of the lumber bought in San Francisco, but that bought here. Answer—Well, that lumber was charged as \$21 a thousand—say, three by sixteen joist. That was the largest could be got on a special order. I believe the shortest twenty-two feet, and the longest twenty-eight feet. Those joist were sized on saw, crowning. They had to be run through the mill twice. Crowning on one side and milling on the other.

Q. How did that price of \$21 compare with the usual price paid for lumber here? A. Well, in my judgment it was at least \$4, if not \$5, less than we ever bought lumber for here on contract. It is very seldom we buy timber of that character here.

Q. How long have you been a contractor in this locality, Mr. Bryan?
A. About eighteen years.

Q. What was the price of that other lumber? A. Well, as I remember the other lumber was—that was below this size—it was \$18, and the ordinary size of lumber \$17.

Q. How does that compare with the prices usually paid? A. They were low, below the prices which I have paid for material on my contract work, and below the prices which other contractors have paid, as far as I know.

Q. There have been charges stated in the papers that you have received from men working on that school building twenty-five—

MR. CAMPBELL [interrupting]: What he has said now, while it may be the truth, it will not establish the truth. There must be some documentary evidence. I think the better way would be to get lumbermen here to give us the prices from their books.

MR. LUSK: We will have the Superintendent of the Lumber Company here to give the prices.

Q. In reference to the charges about your receiving twenty-five cents or four bits a day, directly or indirectly, from men while working on that building—what have you to say in regard to that? A. I have never received one cent from any man that has ever been employed on that building.

Q. Nor ever charged them any commission for putting them at work?
A. No, sir; nor never had a conversation with any man employed on the building about any such a matter. I never heard anything about it whatever, until since the charges have been made in the papers the men have been talking about the matter.

Q. Now, state anything you desire to state in reference to the charges, which you may desire to state. A. Well, I don't really know what the charges are. All I wish to state is what I have stated; and I would like to have every man, so far as it is convenient for the committee to call them—I would like to have every man employed on the building called and asked that question, in regard to that.

MR. LUSK: I would like to ask, Mr. Chairman, if there are any other charges, either directly or indirectly, against the Superintendent.

MR. DOBBIN: Outside of the lumber charges, and that the Superintendent of Construction required the men to return a portion of their wages at the expiration of the week, in order to retain their position, I don't think there is anything.

MR. LUSK: What about that, Mr. Bryan, if any man at the end of the week—or undertook at the end of the week—to return part of his salary to you, in order that he should not lose his position? A. No, sir; they do not, nor have they ever returned one cent. They have never been required to, and they have never done so.

MR. LUSK: The lumber question, Mr. Dobbin, I don't suppose we can place against him, anyhow. That was a matter that we contracted for ourselves.

MR. DOBBIN: In connection with that charge of work having been done by Chinese, do you know anything of work having been furnished, in part or in whole, by Chinese towards the construction of the Normal School here? A. I do not. I don't believe there was ever a brick went in the building manufactured, even in part or in whole, by Chinese.

Q. Do you know of any other material furnished to the institution in the manufacture of which Chinese were employed? A. I think a great deal of the material was furnished by companies which employed Chinese, but whether they were directly interested in the manufacture of the

material is something I am unable to say. There is another matter I would like to speak about. I see that Mr. Davis' name is mentioned in connection with a communication sent to the "Examiner." That is in reference to the lathing. They claim that the lathing is not done properly. I will state that during the time the lathing on that building was being done I had four or five as good lathers working on it as, in my opinion, there were in the State, on that work. Of course there were some men who applied for positions at lathing that I didn't know, and I put them on; but they only lathed for an hour or two, and I required them to quit the work. I think the men were as good lathers as could be found anywhere, and that in the lathing—I wish to state that in the eight thousand yards of lathing work, not quite eight thousand yards—I don't think in the whole of it there are twenty yards in the whole building that will need overhauling at all. And as to the charge of having hired ranch hands with hatchets and axes, and so forth, to do the lathing, I know nothing about that. They were all good lathers working on that building, and as far as I know there was no man who did any such thing.

MR. LUSK: In reference to your employing men who were ranch hands, laborers working around as carpenters, what of that? A. There is not a man who is employed as a carpenter who was a ranch hand. There has not been a ranch hand hired as a mechanic on the building to my knowledge. The work won't show it.

Q. How many carpenters did you employ on that building? A. Perhaps ten or twelve.

Q. What pay did you give them? A. There is one man who has been on the payroll at \$4 per day.

Q. Four dollars? A. Yes, sir.

Q. What is the next? A. Three and a half.

Q. What is the next? A. The others are three.

Q. What is the next? A. No wages below that.

Q. What class of men do you give \$2 50 to on that building? A. We gave two and a half to men who wheeled mortar at the time we were doing the brick work.

Q. What did you pay the brick masons? A. Five dollars a day.

Q. Five dollars a day? A. Yes, sir.

MR. DOBBIN: Is that the regular union rates? A. I know nothing about union rates, on account of never having to go by any. We have no unions in this part of the country.

MR. CAMPBELL: You get \$6 a day? A. Yes, sir.

Q. Now, is there such a thing as three classes of men who can be called mechanics or average mechanics? A. I think so.

Q. Is there any rule by which you can call them that? I see here you pay three different rates of wages, and it is to be presumed that there are three different classes of mechanics. A. I wish to say that we had three classes of carpenters on this building. The first men who were employed on this building were men who had worked for me on contract work. There was one man among the lot that I had always given \$4 a day to, and when he went to work on the school building I continued to give him \$4 a day, because he is a man who is competent to act as foreman, although I have not had him exactly as a foreman, but when I left here for San Francisco I just left him in charge of the work.

Q. I am only trying to get at your ideas of mechanics. I want to know if there is such a thing as that among carpenters—three classes? A. In our business here we have two rates of carpenter wages. There are men on that building that worked for three dollars a day; they are good men

on rough work, but they are not as good as men who are not only good on rough work, but can also do finishing work. In other words, a man who can do all kinds of carpenter work is certainly worth more wages than a man who can certainly do but the rough work.

Q. Is it not a fact that the better the mechanic the cheaper he is—that it is always better to employ a really good mechanic and pay him good wages, than to pay smaller wages to a poorer man who can do as good work? A. I say when you get a man who is a good hand on framing and work of that kind, but who is not good at finishing, I do not consider him as good as a man who can do both rough work and also do finishing work. I said that.

Q. Well, you have been the Superintendent of this building since its inception? A. I have since the commencement of its construction. I was not when the first work was done.

Q. Who gave you your first orders to work the men on that building? A. I do not think I ever had any definite instructions from any source.

Q. Then you have used your own judgment as to the hours of labor you required the men to work on the building—the hours they were to work?

A. When I took charge of that building I found about twenty men—

Q. [Interrupting] Answer the question, please. You simply used your own judgment, or did you use your own judgment, when you required the men at work on that building to work ten hours a day? A. Well, I was just going to explain.

Q. I will ask you the question again. The question I asked you prior to that was: Who gave you instructions to work the men on that school over eight hours a day? A. I say that I don't remember I ever had any definite instructions from any source.

Q. You don't recollect ever having any definite instructions. Then you simply used your own judgment regarding the number of hours they were to work? A. That is what I was going to try to tell when you stopped me. I say, when I started that work, I found about—nearly twenty-five men employed there in excavating the cellar. Those men, I think, were working about ten hours a day and, as has been stated to you, they were on General Bidwell's payroll at \$1 50 per day. There were no persons employed but laborers who were excavating the cellar—there may have been some of those men getting \$1 75 per day. I talked with the members of the Board of Trustees afterwards and I advanced the men afterwards to 20 cents an hour, and I so informed the men, and I informed them that they could quit at eight hours work or at ten.

Q. Who established the hours of work? A. That I can't tell you.

Q. Did you establish them? A. Well, I have explained the matter that far.

Q. Then you will acknowledge that you established them, and you say you never got an order from anybody else to establish them? A. I say, I accepted the situation as I found it. They were working ten hours a day when I found them and only getting \$1 50. I raised them to 20 cents an hour.

Q. And you continued working them the ten hours a day, as you found them working?

MR. MAHER: At any time during the construction of the building did you work less than ten hours? A. Oh, yes, sir.

Q. Was there any difference in the wages received as between the time when you worked ten hours and when you worked less? A. As I said, when I went there there were a number of laborers employed there in digging the hole, excavating a cellar. Some had \$1 50 a day, and some

\$1 75. Their wages were advanced to \$1 80 for nine hours work, which is marked on the original time book, which you gentlemen can examine. After the days got long enough to work ten hours we did so, and their wages were raised to \$2 a day, or twenty cents an hour. During the summer we worked ten hours a day, but when the days began to get short we dropped off from ten to nine and a half; then to nine, and then to eight, without any reduction of any person's wages.

MR. CAMPBELL: You did not reduce the wages when you worked short hours? A. No, sir; I did not.

Q. You did not raise them when you worked long hours? A. I did. I have just stated that their wages were raised from \$1 50 a day to \$1 80 for nine hours work, and then we worked ten hours, and raised the wages again to \$2 a day.

Q. Well, we will take the mechanics, and hodcarriers, and brickmasons, laborers, and so forth, did the reducing of the hours of labor make any difference in their wages? A. No, sir.

Q. When they went on a ten hour shift again, did that make any difference? A. The men first employed—

Q. [Interrupting] I am asking you now about the carpenters, bricklayers, and so forth; the excavators, we have got through with them for the present. Now we are on the mechanics. A. Their wages were not reduced at all.

Q. Were they increased? A. No, sir; they were not increased.

Q. They were left stationary, as they were. By what rule did you establish their wages? A. These laborers were employed about the fall of the year, and the mechanics were employed later on in the season when they could work a longer time. At the time the mechanics were put on the building here, they could work ten hours a day, and when the days shortened and work was quit sooner, neither their wages nor those of the laborers were reduced. That is what I wanted to explain. The laborers went on in the fall of the year and as the days got longer and they worked longer hours, their pay was increased. The mechanics, however, did not go to work on the building until summer time, when we were working ten hours, during the long days of the summer.

Q. Did you have any mechanics on last summer? A. Yes, sir.

Q. Did you pay them the same wages you did as when they worked the short hours? A. Yes, sir; and—

Q. [Interrupting] Then you paid them the same rate of wages for the short hours as for the long? A. Paid the same wages as during the summer season.

Q. Well, do you think that is according to law. A. It is according to custom here.

Q. Then we are governed by custom and not by law? A. Well, I suppose that would simply—

Q. [Interrupting] Well, I simply ask that question and I wish an answer to it. Whether it is by custom or by law we are governed in working. If you deem it is by custom we will make a note of it; if you say under the law we will take the other view of it. It was neither custom or law—it was simply "go as you please?" A. I say it was custom. That is my answer; it is custom with the contractors.

Q. That might be so among contractors working on their own responsibility, but this is an establishment which is being put up at the cost of the State. From your answer I could not understand whether you said it was governed by custom or by the law, because the law says that eight hours is a day's work. You say that custom is what governed you in the

construction of the building? A. It is my understanding that all the men who started to work on that building originally started there with the distinct understanding that they could quit at eight hours if they wished to. Now, I say it is customary with us to work ten hours here, and the wages which we have paid on that building and the shortening of the hours is simply following a custom which all follow here, just as we would do if we were building a house by the day's work or contract work.

Q. Have you any way of giving us about the entire cost of labor paid to date, or since you have been there as Superintendent?

MR. LUSK: You could only do that by getting all the payrolls.

MR. DOBBIN: Why is work stopped on the building at the present time?

A. At the present time?

Q. Yes, sir; at the present time? A. I was asked by the Secretary to stop it.

MR. LUSK: He was ordered by the Board to suspend work, because we had used up our \$50,000, and there was nothing left for us to continue the work with. In fact, we had used up about \$10,000 more, I think, before we stopped.

MR. CAMPBELL: Have you any funds on hand now? A. No, sir.

Q. Are you in debt? A. I think we are about \$3,000 or \$4,000 in debt. We used up the \$50,000 which was originally appropriated, and \$10,000 which we had on hand, and we are now \$2,000 or \$3,000 in debt, I suppose.

MR. DOBBIN: It was not for the reason that this investigation was to be held here that the work was stopped on the building? A. No, sir.

MR. LUSK: We had a meeting of the Board of Directors, and concluded that we would not be justified in going on expending money for which we were personally liable until we knew whether the Legislature was going to pass an appropriation. I called a meeting of the Board as President, and we found that we had expended some \$63,000 or \$64,000 on the work, being some \$3,000 or \$4,000 more than we should have, taking the money we had on hand, and until an appropriation was passed I didn't think we were justified in going on with the work, because I thought if we would spend more money we would be personally liable for perhaps \$20,000 or \$30,000, and I for one did not intend to be personally liable for any such amount.

MR. CAMPBELL: I am under the impression that there is a clause in the bill which provides for the construction of the building for \$50,000.

MR. LUSK: When I went down to Sacramento to appear before the committee in reference to this matter Governor Waterman said: "You have made a deficiency; that is something I do not like. When people come to the end of their appropriation they ought to stop." So we did stop.

MR. CAMPBELL: At the time you commenced you were told it would cost about \$60,000?

MR. LUSK: Yes, sir.

MR. CAMPBELL: Well, how is it now that you think it will cost a hundred?

MR. LUSK: Well, it won't cost a hundred.

MR. CAMPBELL: You have asked for \$40,000 more.

MR. LUSK: Ten of the forty is for furnishing the building. We never asked for forty. That was introduced without our knowledge.

MR. CAMPBELL: I do not mean you. I don't mean to be personal. The bill that I read in the Senate and was called to our attention required \$40,000 for the completion of the building here and \$25,000 for furnishing it.

MR. LUSK: No, I think you are mistaken, Senator. The total was fifty—twenty-five for finishing, and twenty-five for furnishing. The total cost of the building will not exceed \$83,000, and the bill will not cover over that amount. The total is forty thousand—ten thousand for furnishing, and thirty for finishing.

MR. DOBBIN: I was informed at Sacramento by the representatives from this county in the Assembly that one of the reasons that work was ceased on this building was that they wanted the investigation finished before the work went on, and that they wanted it held as speedily as possible, for the reason that there was one thousand dollars worth of mortar on the ground that was liable to spoil, and they wanted to use it up just as soon as they could. Is there that much mortar on the ground liable to be spoiled if not used soon?

MR. LUSK: No, sir; there is only about one hundred barrels mixed up. The brick for this building at first designed by our architect and approved at San José, and contemplated two classes of work, the main work to be made of what they call common brick, the exterior wall, the facing to be made of what they term stock brick—that is what they term it. There is quite a difference in the prices of the different brick. The common brick was made and delivered on the ground for \$7 75 a thousand; the stock brick, \$15 15 a thousand. Then, of course, there was some little extras for fancy shaped bricks for the corners, and one thing and another of that kind. The brick work was laid out by our architect in the plans in a very original manner, so that it was a very stiff and rich mortar that was used.

MR. DOBBIN: Can you give us the name of the San Francisco firm that supplied the brick?

MR. LUSK: No brick supplied from San Francisco. This brick I have spoken of was shipped from Anderson to us and was not a success; so then we contracted and had it made on the Sacramento River, down here about five miles from this town. The contractor who made them first got Mr. Davis, from Sacramento—a brickmaker in Sacramento, and I believe one of the best in the State—and two or three others, to get their views about the making of the brick, and about the proper manner of making this stock brick; and the result was that we got a brick as good as ever came into San Francisco. Our architect said it was as good as ever went into San Francisco. The same class of brick at San Francisco were selling at \$9 50 to \$14 50 per thousand, and we got our common brick for \$7 75, which was considerable less, and our stock brick we have paid \$1 more for, \$15 50. There is considerable trouble in manufacturing them, and they have to be hauled in straw so their corners won't be marked.

HON. JOHN DAVIS.

Sworn.

MR. CAMPBELL: Now, Mr. Davis, whatever you know of the case, you will please state to the committee. Answer—I will state, Mr. Chairman and gentlemen, it is not anything in regard to the case; it is only my position I wish to explain. There is a gentleman in San Francisco who is connected with the Federation of Trades. When he found I was on this Public Buildings Committee, he came and asked me and Mr. Mullaney, and requested us to investigate certain matters, when we came up, in connection with the construction of this building; that their attention had been called—reports made to them. I told him I would do all in my power in doing so. And I will state that I have no information whatever of the charges written with my name attached to them. I have never made any.

When we came up here Mr. Mullaney went all around the building, and went outside and talked to different persons employed about the building. I stayed with the balance of the members of the committee, and thoroughly inspected every portion of the building with them. Before we returned to Sacramento, in the hotel, Mr. Mullaney was talking to some gentleman who lived here who had formerly been employed on the building. He introduced the gentleman to me, and Mr. Mullaney was talking about the thorough inspection he had made. This gentleman made certain statements, and I told the gentleman if there was any truth in any of these statements it would be a great benefit to me if he would go to the lumber company and ascertain the price of lumber here and what lumber was sold for in Sacramento; and that if there was any truth in the rumor that men employed on the building was paying anything out of his wages to keep his position, to inform me at once, and he promised to do so, but I have never received any word from him since. The first notice of this examination was given to me by Mr. Porter. So far as the report about the laths not being put on properly, I positively deny that. I claim it is a very good job, and in my experience as a builder for eighteen years, I never saw a better. I have never made any charges whatever and have never authorized my name to be used in any case whatever regarding any, and was as much surprised as any one upon seeing my name attached to them. I promised to investigate the matter and that is as far as I went in the matter. In justice to the Directors of this institution I make this statement, as well as in justice to myself. I do not know of any reason why I was placed on this committee except what Mr. Porter said, that my name had been coupled with the matter.

MR. PORTER: What is your business? A. Contractor.

Q. When did you start in the business of contracting? A. Started in the business in 1869.

Q. Have you followed it continuously ever since? A. Continuously. You and I have had a number of talks about this matter; does it bear out my statement?

MR. PORTER: Yes, sir.

MR. CAMPBELL: I got my information from some of the committee that were up here, and it was common rumor; even on the railroad car, coming from San Francisco, a week ago last Monday, nearly everybody had it, and when the bill for an additional appropriation came up in the Senate I antagonized its passage, simply to give me an opportunity to place my statement before the Senate. Since that was accomplished, Senator Jones appealed to me to lay my objections aside, and I did so, so the building could go on. This same man you speak of, if it is the same man, came to me several times, and was very persistent in forcing his views on me. The man was under the influence of liquor, and I told him—I got away from him as quickly as I could, and told him if he had any charges to make, to do it and put them in shape, and send to me or some other person in the Assembly or Senate, and we would investigate them.

MR. DAVIS: You and I have never had any conversation on this matter, have we?

MR. CAMPBELL: Not to my knowledge. We have spoken several times, but never in reference to this particular matter.

MR. DAVIS: I simply wished to make my position clear to the committee and the Board.

On motion of Mr. Davis the Joint Committee adjourned to meet at one o'clock P. M.

[During recess the full committee visited the building in course of construction, known as the "Branch State Normal School," and examined the lathing referred to in the previous testimony.]

AFTERNOON SESSION.

The committee met at 1:30 o'clock P. M.

F. C. Lusk.

Recalled.

In reference to the price of lumber, the offer that we accepted, the lowest bid, was as follows:

SIERRA LUMBER COMPANY, CHICO, CAL., April 18, 1888.

The honorable Board of Trustees of the State Normal School, Chico :

GENTLEMEN: We offer to furnish lumber for the State Normal School (signed as per memorandum of Mr. Bryan), as follows:

3x16 joists, 12 feet to 38 feet sized on saw, crowning, 139,688 feet, at \$21 per thousand sand	\$2,933 45
22,524 feet rough lumber, at \$17	382 91
24,000 linear feet 1x2 furring, 3-8	90 00
37,000 feet crowning, S. I. S., at \$18 50	684 50
46,456 feet 2x6 and 3x6, sized on plane, at \$18	836 21
	\$4,927 07

Respectfully,

SIERRA LUMBER COMPANY,
By C. E. TINKHAM.

That being the lowest offer of those bids for lumber, was accepted, and they made contracts. Here is another bid which was accepted:

SIERRA LUMBER COMPANY.

The Sierra Lumber Company, a corporation, hereby agrees to furnish to the State of California, to be used in the erection of a Normal School at Chico, that certain lot of lumber described and set forth in a certain bill furnished it and marked Bill No. 2, for the following sums:

Twenty-four thousand lineal feet of 1x2 furring, for \$90; 37,000 feet common S. I. S., for \$18 50 per thousand feet, and 46,456 feet 2x6 and 3x6, sized on the planer, at and for \$18 per thousand feet.

The said lumber is to be furnished in accordance with the figures thereof contained in said bill. It is to be furnished and delivered under the direction of, to the site of, and at the time or times required by the Superintendent of said building.

Dated, April 24th, 1888.

SIERRA LUMBER COMPANY,
By C. E. TINKHAM.

The contract for the making of the brick was as follows:

Contract made March 12, 1888, for the making and delivery of brick for the State Normal School at Chico, California.

The Board of Trustees of the State Normal School by their executive agents, the Board of Trustees of the State Normal School at Chico, is the party of the first part herein.

Burnham & King of Chico, aforesaid, is the party of the second part herein.

The second party agrees that it will manufacture and deliver to the first party at the building site of Normal School at Chico, 300,000 ordinary brick and 190,000 stock brick.

The said brick are to be made on or near the Sacramento River, and are to be done and ready for delivery from the kiln on or about the fifteenth day of June, 1888.

Said brick are to be wholly made by white labor; no Chinese labor can be employed in the manufacture thereof.

The said brick are to be burned with dry wood. The brick are to be in molds nine by four and three eighths by two and a half in size. The said brick are to be ready for delivery from the kiln on or about the fifteenth day of June, 1888. They are then to be delivered to the first party at least as fast as the first party may want to use them, and are to be delivered at the site as the Superintendent may from time to time direct.

The 300,000 ordinary brick are to be good, hard merchantable brick. They are to be made in sanded molds, and to be what are termed sand-made bricks, and to be of uniform size.

The 190,000 stock brick are to be so molded and made that they will be about an eighth of an inch larger each way than the ordinary brick. They are to be in their manufacture in all things like what is known in the San Francisco market as stock brick, and that

sells in that market for \$5 50 to \$6 more per thousand than ordinary brick. They are to be made in sand molds. They are to be made in finely ground selected clay. They are to be hand-rolled in the usual way before placing in the mold. In their manufacture everything is to be done and everything used that is used and done in the manufacture of the brick known in the San Francisco market as the stock brick, as aforesaid. They are to be as near like the sample now before the parties as the nature of the clay of which they are made will permit. They are to be made in the same manner and soil of said sample, and with the same concave depression on one side.

All brick, when delivered, are to be taken from the wagon by hand, and are not to be dumped to the ground.

The first party agrees to pay for all brick delivered in accordance with the terms of this contract, viz., \$15 50 for each thousand of said stock brick, and \$7 75 for each thousand of said ordinary brick.

Executed in duplicate.

STATE BOARD OF TRUSTEES OF THE NORMAL SCHOOL OF CALIFORNIA,
BY THEIR EXECUTIVE AGENTS THE BOARD OF TRUSTEES OF THE NORMAL SCHOOL AT CHICO.

F. C. LUSK, President.

JNO. E. GLEASON, Secretary.

BURNHAM & KING.

In reference to the amount of payrolls on the building for lumber from the beginning, including the payroll for making brick at Anderson, the total amount, if added correctly, is \$21,740 08.

MR. CAMPBELL: That is the payroll—— A. For the entire thing from the time it was started. I think it is correct.

Q. If not absolute it is supposed to be correct? A. Yes, sir. It was added hurriedly here.

Q. Well, Mr. Lusk, in the brick part of the business there is just one little item in my mind. The brick ought to be furnished, 300,000, at \$17 50? A. No, sir; \$7 75.

Q. At \$7 75, and one hundred thousand at \$15 50? A. One hundred and ninety thousand.

Q. Does that include the Roycroff cost for burning them? A. The Roycroff brick are in addition to that.

Q. They are in addition to that? A. Yes, sir.

Q. These bricks are not the ones that were made at Anderson? A. All the stock brick are made here. The Roycroff brick was a kiln we had made first, and we were not satisfied with it; we found it was not going to pay us to ship them by railroad from there.

Q. If they were to furnish them for that amount of money per thousand, why should the State have to pay for the kiln and labor of making them? That is what I want to know. A. The Roycroff brick are not included in these prices. The Roycroff brick were made by themselves under a contract by which he was to burn a kiln for us by contract.

Q. And that has nothing to do with these four hundred and ninety thousand brick? A. Nothing at all. Those we contracted for.

Q. Speaking of lumber, was that about the market price for lumber at Chico at that time? A. It was below the market price for lumber at Chico at that particular time, for each kind.

Q. Is there any way that we can get proof of that, from any lumber merchant in town? A. I presume so, if proof is desired in that way. We advertised for bids for lumber, and we took the lowest bid.

Q. There was no purchase at all? A. How?

Q. There was no purchase at all of lumber? A. Oh, yes; there was some in San Francisco—that Oregon pine; and then flooring was another kind. We were advised by the Attorney-General up here that we need not advertise for bids under \$3,000. We just went to different houses, and saw where we could do the best, and bought it there.

MR. LUSK: Mr. Bryan, you were familiar with the market price of lumber in this town for how many years? A. About eighteen.

Q. Those contracts made with the Sierra Lumber Company, how were the prices of that lumber—the figures given—how did they compare with the figures for lumber in this town? A. They were all contracted for at a lower price than the ordinary price.

Q. And such bills of lumber that you purchased in San Francisco, how did they compare with the market price for the same kind of lumber in San Francisco? A. I got three bills, I think.

MR. CAMPBELL: Who did you get the lumber from?

MR. BRYAN: The San Francisco Lumber Company—the Oregon pine. Their figures were the lowest.

Q. What was that a thousand? A. Well, it was different prices. It ranged from about thirty-six feet up to seventy-five feet. There is a different price on the different sizes. I can give you the prices by looking at the bills. The prices on each item were below what was on the printed schedule of the Lumber Union at that time.

MR. LUSK: All the lumber companies of San Francisco had a union at that time, had they, to sell at a uniform price? A. Yes, sir.

Q. And that combination is since broken? A. Yes, sir. We got the benefit of it on the later purchases.

J. J. BARHAM.

Sworn.

MR. LUSK: Mr. Barham, have you ever worked on the Normal School at Chico? Answer—Yes, sir.

MR. CAMPBELL: What is your occupation? A. Laborer.

MR. LUSK: What class of labor were you doing on the building? A. Well, when I first went there I was helping to do the excavating, and so on, and helping on the concrete—done different kinds of work.

Q. And received what wages? A. Well, when I was first hired General Bidwell hired me. I got \$1 75 a day. I worked for that up to the time that Mr. Bryan raised the wages to 20 cents an hour. I don't recollect how long that was.

Q. So, then, what labor you have done since that has been at 20 cents an hour? A. Yes, sir.

Q. If you worked ten hours it would be \$2? A. Yes, sir.

Q. Well, Mr. Barham, do you know anything about Mr. Bryan ever having exacted or taken back part of the wages of the men on that building? A. No, sir.

Q. Did you ever hear of such a thing? A. No, sir; and I don't think he ever done it, either.

Q. Did you ever hear of any complaint or dissatisfaction on the building among the men with the Superintendent? A. No, sir.

Q. Or with the wages they were getting? A. Well, no; not particularly; but I have heard them say they thought they were working longer hours than they ought to, some of them.

MR. CAMPBELL: How long did you work at \$1 75 per day? A. Well, now, sir—

Q. About how long? I don't care about a day or ten—about how long? A. Well, it must have been probably a month; maybe not quite so much and maybe more.

Q. Probably a month? A. Yes, sir. It was all during the time that we were excavating the cellar out.

Q. Was there ever any talk amongst the men on the building, to your knowledge, in relation to the hours of labor or the wages paid? A. Was there ever any—

Q. Was there any dissatisfaction, any talk amongst the men; any agitation? A. Well, yes, sir; I have heard some.

Q. Well, tell us what you have heard? A. Well, all I ever heard was some few parties talking about it.

Q. You need not be afraid now; go right ahead and tell us what you have heard? A. I am not afraid; I will tell you all I heard and what I know and nothing else. I have heard some of them talking, and one party I think, wrote a letter to find out the wages. Whether he found out anything or not I could not tell you, because I never heard.

MR. LUSK: That was a party that was working at \$1 50, wasn't it? A. Well; I don't know what they was working for.

MR. LUSK: There was a party working for \$1 50 a day understood all State work was \$2, and wrote to the Superintendent of Instruction to ascertain if such was the fact.

THE WITNESS: There was some men there worked for \$1 50 that General Bidwell—

MR. CAMPBELL [Interrupting]: I didn't ask you about that; I asked you about the general opinion among the men, if there was any dissatisfaction among them; if there was any agitation; if the men themselves were dissatisfied about the pay and hours of labor? A. Well, yes; like all other men working, like all men, they talked among themselves a great deal about wages and one thing and another, and it never amounted to anything.

Q. Why didn't it amount to anything, sir? A. Well, if they didn't want to work for the wages they should have quit.

Q. Did they ever ask the Superintendent or Trustees about it? A. No, I don't think they did.

Q. They did not. Why was it they didn't ask? A. That I couldn't tell you.

Q. Well, why didn't you ask? A. Why didn't I ask?

Q. Yes, sir. A. Well, I supposed I was getting probably as much as I would get if I asked the Trustees.

Q. Was it because you were afraid you would be discharged? A. No, sir; not particularly.

Q. Why did they raise the wages to 20 cents an hour? What was the difference between 20 cents an hour at ten hours a day and \$1 75 for a legal day's work, which is eight? A. I couldn't tell you.

Q. Did they increase your wages then? A. That increased my wages; yes, sir. After Mr. Bryan got in, a few days after—I don't know how many it was—he raised the wages to 20 cents an hour.

Q. Did he tell you he paid you by the hour? A. Did he?

Q. Yes. A. That was my understanding, sir.

MR. DOBBIN: Mr. Barham, you first went to work on that institution helping to make the basement; and how long did you work at that, you say? A. Well, the first work I done on the grounds there was digging some trenches to drain the water, which, I believe, pretty much surrounded all the ground. It was to drain the water off in case of a heavy rain.

Q. Well, after that? A. I went to work helping to excavate.

Q. And after that was finished? A. Then I went, I think, to helping on the concrete. Right away after that I couldn't tell you what I done. There was so many different jobs I done.

Q. And after the concrete part of the job was finished, what else did you do? A. I haven't done anything since the foundation was completed.

Q. You never did any skilled labor on the building? A. No, sir.

Q. Or attempted to do any skilled labor? A. No, sir; nothing of the kind.

GEORGE GOODRICH.

Sworn.

MR. CAMPBELL: The order of the Chairman is that all witnesses not being examined remain outside of doors during the examination.

Question—What is your occupation? Answer—Laboring man.

Q. Laborer. Have you ever worked on the State Normal School—the one here? A. Yes, sir.

Q. You worked as a laborer on it? A. Yes, sir.

Q. About how long have you worked there? A. Well, I think I put in about two months and a half or three months altogether.

Q. About three months altogether. About what time did you go to work there? A. I think it was—

Q. Was it in the early part of the commencement of the construction of the building? A. Yes, sir. They were laying the foundation.

Q. About the time they were laying the foundation. What wages did you receive? A. \$1 90.

Q. Did you ever hear any agitation or dissatisfaction amongst the men as to the hours they were working or the pay they got? A. No, sir.

Q. Were you dissatisfied? A. No, sir.

Q. Did you ever ask for more? A. No, sir.

Q. Were you ever asked to work by the hour or by the day? A. Well, that is something I couldn't answer.

Q. You can't answer that. Well, could you if you wished? A. Well, I supposed when I went to work there I worked by the day.

Q. You worked by the day? A. I supposed the \$1 90 was a day's work.

Q. You worked ten hours a day for that \$1 90? A. Well, didn't get in a full ten hours; nine hours, and nine and a half, it was.

Q. Did you ever work ten hours? A. Yes, sir; I have.

Q. Did you get any more pay for the ten hours than you did for nine and nine and a half? A. No, sir.

Q. You got the same pay no matter how long you worked? A. Yes, sir.

Q. During the time you worked on that building, did you ever hear any person say—or have you ever heard since, or at any time—any person say that they had to give anything or contribute anything to any person connected with the construction of the building, either the Superintendent or any person in any other capacity? A. No, sir.

Q. Was it ever rumored in any way? A. I never heard any one say anything of the kind.

MR. DOBBIN: Did you ever pay the Superintendent of construction anything to secure you the position? A. No, sir.

Q. You did not? A. No, sir.

Q. Did you ever know of anybody who did? A. No, sir.

MR. LUSK: Did you ever hear, Mr. Goodrich, of anything of the kind until it came up in the newspapers a week or so ago? A. No, sir; the first I ever heard of it was in the papers.

MR. DOBBIN: In justice to the Superintendent it is necessary to ask those questions.

MR. RYAN: I don't see Mr. Goodrich's name on the payroll for \$1 90. It is on the payroll \$1 80. A. It was \$1 80 for nine hours, nine and a half.

THOMAS SCOTT.

Sworn.

MR. CAMPBELL: What is your occupation, sir? Answer—Laborer—common laborer.

Q. Have you ever worked on the State Normal School at Chico? A. Yes, sir.

Q. About how long have you worked there? A. Well, off and on since it started.

Q. Off and on since it started? A. That is, since they went in to put in the foundation.

Q. What pay did you receive for the time you worked there? A. Well, I got \$1 80 a day when I started in. That is last winter.

Q. That is all you got? Your pay was always uniform; the same—\$1 80 a day? A. Well, if I worked a full day.

Q. I am speaking of a day's work—\$1 80. Then did you ever work nine hours a day? A. Yes, sir.

Q. Got \$1 80? A. Yes, sir.

Q. Did you ever work nine and a half? A. I don't remember whether I worked nine and a half or not.

Q. Well, you worked nine? A. Yes, sir.

Q. And ten? A. Yes, sir.

Q. You got the same pay for nine you did for ten? A. No, sir.

Q. Did not? A. No.

Q. How much did you get for nine hours? A. I got \$1 80.

Q. How much did you get for ten? A. I got \$2.

Q. You got \$2 for ten? Well, were you working by the day or by the hour when you got the \$2? A. Well, there was nothing said, but I suppose it was by the day.

Q. You supposed by the day? A. Yes, sir; that was what I calculated.

Q. After you got \$2 a day did you ever work nine hours again? A. Yes.

Q. What did you get then? A. Two dollars.

Q. You got \$2 then, whether you worked nine hours or ten. Do I understand right now? A. Yes, sir.

Q. What I am after is simply this: If the hours of labor made any difference in the day's pay, whether you worked nine hours or worked ten hours; if you worked nine hours you got \$2 a day; if you worked ten hours you got \$2 a day? A. Yes, sir; that is, the last winter.

Q. I am speaking generally, from the time the building started up to the present time. Now, have you ever heard of any one being dissatisfied with the hours of labor they were working, or with the pay they were receiving? A. No; not that I could remember any names.

Q. Well, general rumor or general talk. Were you yourself? Take yourself, for instance. A. Well, I was satisfied with what the balance were getting.

Q. Were you satisfied yourself that you were treated right, and that you were working the hours the law required you to? A. Well, no; I always supposed—

Q. You were not satisfied? A. I supposed that eight hours was a day's work.

Q. Yes, and you were dissatisfied in your own mind because you had to work ten? A. Well, yes. I never complained.

Q. Now, did you ever make any complaint or ever make your opinion known to the Superintendent, or to any one who had authority to control the time or pay in connection with the work done on that building? A. No, sir; I did not.

Q. You never did? A. No, sir.

Q. You only nursed your wrath to keep it warm? A. Yes, sir.

Q. But never made it known to any one during the time you worked on the building and in conversation with any one. Have you ever heard any one express an opinion that he ought to contribute anything to anybody? A. No, sir.

Q. To get work or to retain it after he got it? A. No, sir.

Q. Never did? A. No, sir.

MR. LUSK: When you started in it was the winter of 1887-88? A. Yes, sir.

Q. And you were working this winter? A. Yes, sir.

Q. When you were working nine hours you got \$1 80? A. Yes, sir.

Q. After the days got so you could work ten hours, you got the same? A. Yes, sir.

Q. Your wages were still kept at \$2? A. Yes, sir.

ALEXANDER N. MCGILVEY.

Sworn.

MR. CAMPBELL: What is your occupation? Answer—Mason.

Q. A mason, a stonemason? A. Plasterer and bricklayer.

Q. Have you worked on the State Normal School at Chico? A. I have.

Q. How long have you worked there? A. Probably four or five days.

Q. When have you worked that four or five days? A. On the coping, on the cementing; on the coping.

Q. Did you ever lay any brick on it? A. No, sir.

Q. Did you ever do any plastering on it? A. There is no plastering on it. There is nothing but the cementing on the coping.

Q. You only worked four or five days? A. Yes, sir.

CHARLES MARSHALL.

Sworn.

MR. CAMPBELL: What is your occupation? Answer—Bricklayer; general mason.

Q. Have you ever worked upon the State Normal School at Chico? A. Yes, sir.

Q. How long did you work there? A. Well, I worked there all summer; perhaps one hundred and forty or fifty days, in that neighborhood.

Q. What wages did you receive per day, Mr. Marshall? A. Five dollars per day.

Q. How many hours did you work? A. Well, I worked ten hours a portion of the time.

Q. You worked ten hours. Did you work any more or any less? A. Well, I expect I worked a little less during a part of the time; in the fall, when we couldn't see to work at night.

Q. How much difference? A. I could not tell.

Q. Did you ever work nine hours? A. Yes; I think about nine hours.

Q. Did you ever work nine and a half? A. About that time, probably.

Q. Probably about that time. Was there any difference in the rate of pay that you received? A. No, sir.

Q. You got the same pay for ten hours work you did for nine or nine and a half hours? A. Yes, sir.

Q. Do you belong to any society or trade organization? A. No, sir.

Q. Do you know anything about the rules of the society? A. No, sir.

Q. Did you ever work in the City of San Francisco? A. I have worked there.

Q. How long since? A. I have worked there fourteen or fifteen years.

Q. At the time you worked there did you know of any trades union or society? A. I knew there was such a thing.

Q. Did you belong to it there? A. No, sir.

Q. Did you work at bricklaying then? A. Yes, sir.

Q. Well, were you considered a skilled mechanic? A. I was on that job; yes, sir.

Q. Did skilled mechanics allow you to work with them? A. Yes, sir.

Q. And you not a union man? A. Yes, sir.

Q. During the time that you worked on this building was there any dissatisfaction, open or private, manifested by the men as to the pay they got or the hours of work? A. Nothing in particular.

Q. Nothing in particular. Well, then, was there anything? A. Well, I heard men say that they thought they ought to work eight hours only.

Q. Did you volunteer to work ten hours a day? A. I guess I did. There was nothing said about it. I was not asked to work any particular time. I was just asked to go to work and I went to work.

Q. You were satisfied to work as long as the boss told you? A. I was satisfied; yes, sir.

MR. DOBBIN: You would rather work eight hours, wouldn't you? A. Well, of course I would.

MR. CAMPBELL: Outside of State work, do bricklayers throughout the State work ten hours a day? A. Generally they do.

Q. Take San Francisco, Sacramento, Alameda, Stockton, or anywhere else? A. I do not think they do.

Q. How many hours do they work? A. I suppose nine hours.

Q. And nine hours on private work is a day's work? A. That I don't know anything about.

Q. What is the present rate of wages for bricklayers at the present time? A. I suppose the average is five dollars a day.

Q. Is it not six? A. Well, that I don't know.

Q. You don't know anything then about the relations—the rules or regulations governing the rates of bricklaying? A. No, sir.

Q. You would be what would be called in San Francisco one outside of the society—a scab—meaning no disrespect to you whatever? A. I know the meaning of it exactly.

Q. You know what I mean? A. Yes, sir.

Q. Then understand right? A. Yes, sir.

Q. At any time since the commencement of the erection of the building have you known or have you heard of any person having offered or given to any person connected with the management of the construction of the building any bonus or anything for giving them work or keeping them at it after they got it? A. No, sir; I have not.

MR. DOBBIN: I ask you this question as a bricklayer. During the time you worked on that institution, laying brick, did you know that there was any Chinese brick, or brick used in the construction of that school which Chinese had been employed to manufacture? A. No, sir; I did not.

A. Did you ever hear it rumored? A. No, sir; not during the time I was working there.

Q. You worked there a hundred and forty days? A. About that; I am not sure.

MR. LUSK: I suppose a rumor would not be taken as evidence.

MR. DOBBIN: I have been instructed to look into this particular matter relating to Chinese.

ROBERT HUMPHREY.

Sworn.

MR. CAMPBELL: What is your occupation? Answer—Bricklayer and plasterer.

Q. Have you ever worked on the State Normal School at Chico? A. Yes, sir.

Q. How long, or about how long? A. Seventy-five days, about.

Q. About seventy-five days; about what time of the year was that? A. The latter part of July until the last of September.

Q. The days that you worked there; about how many hours did you work? A. How many hours? Ten hours.

Q. You worked ten hours? A. Yes, sir.

Q. Did you work by the day or hour? A. By the day.

Q. What wages did you receive? A. Five dollars.

Q. You received \$5 a day; you never worked less than ten hours, did you? A. Yes, sir.

Q. You did? A. Yes, sir.

Q. About how many hours did you work then? A. Nine and a half.

Q. Work any less than nine and half? A. Yes; there was one or two days about nine hours, I guess.

Q. Did you receive \$5 a day for the nine hours and nine and a half as well as for the ten? A. Yes, sir.

Q. It didn't make any difference? A. It didn't make any difference; no, sir.

Q. Do you know what are the current rates for bricklayers in California? A. Five dollars.

Q. Do you know that? Did you ever work outside of here? A. Yes, sir.

Q. Did you ever work in San Francisco? A. No, sir.

Q. Ever in Oakland? A. No, sir.

Q. Sacramento? A. Worked in North Sacramento.

MR. LUSK: Would it not be best to confine that question to this part of the State? These witnesses cannot be expected to know the rates in the northern part of the State, or in the southern part of the State.

MR. CAMPBELL: I will tell you what I am getting at. I want to find out if all these men who were employed on this building were what are known as "scabs."

MR. LUSK: There is no law to the effect that a man must belong to a labor union.

MR. CAMPBELL: No, sir. It is a standard rule that those who will not maintain the dignity of their own crafts or calling, is not maintaining what is known as the full dignity of mankind. Because they are outside of their union, or crafts, or guilds, or whatever they are called, they are ready to accept any work, because they are in rebellion to the society to which they belong.

Q. Now, while you were working on the building as a bricklayer, about how many bricks a day did you lay? Do you know the average number of bricks that a good brickmason is satisfied to lay a day? A. There is no average; I couldn't state it.

Q. Well, we want to know about how many you lay in a day? A. About how many I lay?

Q. Yes, sir? A. Well, part of the time I would be on the outside, and wouldn't lay so many as if on the inside.

Q. Well, I ask you as a general thing. Would you lay five hundred? A. Yes, sir.

Q. Would you lay a thousand? A. Some days, yes, sir.

Q. Do you know what is a full day's work for a bricklayer? A. No, sir; nor anybody else.

Q. I am speaking of an average. If you were working for a contractor in San Francisco about how many would you average a day? A. It would depend where I was. It is like driving nails.

Q. Well, now, give us an average. A. Well, it might average from five hundred to fifteen hundred, front. It depends on where you are.

Q. About how many, then, did you lay in a day? A. I couldn't tell you.

Q. You can't tell us? A. No, sir.

Q. You never kept any account of the brick you laid? A. Never kept any account; no, sir.

Q. But you worked ten hours or nine hours, just as it would come, maybe as you were told? A. Yes, sir.

Q. And you don't know how many bricks you laid nor a day's average number of bricks any mason will lay in a day? A. I can't tell you. If you could tell me where he was working I might tell you.

Q. Well, outside or inside. A. He might lay three thousand on the inside.

Q. How many on the outside? A. From five hundred to fifteen hundred.

Q. And you can't tell how many you would lay in a day? A. I might tell you what I would lay one day and then the next I would lay less.

Q. Well, I am taking either outside or front. I am only asking you what you would do in a day. Give me any average day's work you did there on that building. I only simply ask the question to test your knowledge of your own trade. A. Well, let it be outside eight hundred, and two thousand on the inside.

Q. You laid two thousand on the inside? A. Well, fifteen hundred.

Q. Will you swear that you ever laid two thousand brick on the inside in a day on that building? A. Two thousand?

Q. Yes, sir. A. Yes, sir, I will; one day, on one day.

Q. You will swear you laid two thousand? A. Yes, sir; I might not have done it many days, but I have done it one day.

MR. LUSK: Did you ever hear of any of the men on that building being required to give back part of their wages to the Superintendent as a condition for their remaining there? A. No, sir; never.

Q. Did you ever hear any dissatisfaction expressed as to the way he was doing the work, the Superintendent? A. No, sir; I did not.

EVAN KNAPP.

Sworn.

MR. CAMPBELL: What is your occupation, Mr. Knapp? Answer—I am a bricklayer.

Q. Have you ever worked on the State Normal School at Chico? A. I have.

Q. About how long have you worked there? A. Well, I should judge it was about seventy-five days, may be; I don't really recollect.

Q. About seventy-five days? A. I think so.

Q. What wages did you receive, Mr. Knapp? A. Five dollars a day.

Q. Five dollars? A. Yes, sir.

Q. About how many hours a day would you usually work? A. Most of the time it was ten hours.

Q. Ten hours. What was the balance? A. Well, part of the time it was nine.

Q. Nine. Any other time? A. Well, sometimes probably nine and a half. Getting towards the latter part of the season it was nine hours.

Q. Was there any difference in the pay? A. None whatever.

Q. None whatever? A. No, sir.

Q. You got \$5 a day whether it was ten hours, nine hours, or nine and a half? A. Yes, sir; I worked there some eight hours, too.

Q. You worked eight hours? A. Yes, sir.

Q. What did you get for that? A. Five dollars.

Q. Five dollars for eight, nine, and a half, and ten. During the time you worked there did you ever hear any dissatisfaction amongst the men as to the hours they worked, or the rate of pay that they got? A. It was frequently talked about among us.

Q. It was considerably talked of? A. Among us; yes, sir.

Q. Did you think that the law was carried out in your favor? A. I knew that the law was eight hours.

Q. You knew that the law was eight hours? A. I did.

Q. Why then did you work ten? A. Well, circumstances.

Q. Was it compulsory or voluntary? A. Well, both. I would rather do it than do nothing.

Q. Then you were compelled to do it, else you could not get work on that building? A. Well, I think so; at least, I should judge so. There was no proposition made about it, but then—

Q. Did you ever make any application to the Superintendent? A. I never did.

Q. Or do you know of anybody else that did? A. I do not; no.

Q. Or did you make any application to Mr. Lusk, or any one connected with the management outside of the Superintendent? A. No, sir.

Q. Never made any? A. No, sir.

Q. Well, why was it that you did not make any, if you were dissatisfied? A. I was busy with a contractor on a building right across the street here.

Q. You were busy? A. Was building a house here.

Q. I asked you why, when you were dissatisfied with the hours, why didn't you make application about it? A. I didn't think it was necessary.

Q. Didn't think it was necessary? A. No.

Q. Or, in other words, it was dangerous to do so? A. Well, I might have thought that, too.

Q. Now, at any time that you worked there did you ever hear of any rumor, or do you know of your own knowledge, of any one having secured—where any person gave to the Superintendent or any one connected with the management or control any bonus to get work there or to keep the work after they had received it? A. I never have.

Q. Never have? A. No, sir.

Q. I am satisfied there never was, but I asked it to develop it right here. Do you belong to any trades union? A. I do not.

Q. Did you ever? A. Yes, sir.

Q. Where? A. San Francisco.

Q. How long ago? A. It was in 1866, 1867.

Q. You never heard of any one giving anything to anybody connected with that work? A. No, sir.

Q. Do you know what is the current wages of your craft outside of this locality? A. Five and a half a day, I believe, in San Francisco and Oakland.

Q. For how many hours? A. For nine hours.

Q. About how many brick is a good bricklayer supposed to lay for an average day's work on the front of a building, and on the inside of it, giving an answer to each? A. Well, that would depend entirely upon the portion of the building he is working on.

Q. Well, as I said—of course I don't mean fancy and ornamental work; I mean plain work? A. A good man would lay five or six hundred on some portions of the work, and in other portions eight hundred, on that class of work.

Q. Well, does that five or six hundred or eight hundred mean the front of the building or the inside? A. The inside would include the eight hundred. Outside would be from five to six hundred.

Q. Well, on the inside wall it would be eight hundred? A. Eight hundred.

Q. That is plain, rough work? A. Yes, sir; good, solid work; good and solid.

MR. BRYAN: How much do you pay your bricklayers, when they work? A. Five dollars.

Q. For how many hours' work? A. Ten hours.

Q. Do you know whether there is any difference here as to those belonging to a union and those who do not belong to it? A. None at all.

Q. Did you ever make any difference when you employed them? A. Never did.

MR. DAVIS: Is there a Union of bricklayers north of Sacramento in the State of California that you know of? A. None that I know of.

Q. Then it is not governed by the Union at all north of Sacramento? A. Not at all.

MR. LUSK: Five dollars is the current wages here? A. It is.

Q. And when you say five and a half you refer to San Francisco and Oakland exclusively? A. Yes, sir.

MR. CAMPBELL: Do you know the current rate of wages in San Francisco, do you know it? A. I did last year. I was in Oakland. City of Oakland.

Q. What was it there? A. Five and a half.

Q. Was it not six? A. I think some of them got six.

Q. Didn't bricklayers that can lay from fifteen hundred to two thousand brick a day get six dollars? A. Not that I know of. I had some work there of my own and I didn't pay but five.

Q. Well, in contract work in San Francisco, how many brick is a day's work for an average workman? A. Well, I should judge about two thousand brick is an average day's work.

Q. And you laid from five to six hundred here? A. I mean on contract work.

Q. This is the same as contract work; it is a day's work? A. Quite a difference.

MR. DOBBIN: If you hired a man to work for you, and paid him five dollars a day, would you be satisfied with him if he only laid five hundred brick a day? A. Well, no; not if I had a contract. I think if I was doing such work as that I would be satisfied with it.

MR. LUSK: It is your idea that workmen, working there on that building, for five dollars a day, and working ten hours a day, were laying considerably less brick than they would if working on a contract? A. Of course they did, because it was a different class of work entirely from contract work. There is no such work done on contract here.

Q. Do I understand, then, that a workman working over there—working this summer, ten hours a day, at \$5 a day, did no more work than a workman, working around here on contracts, would in eight hours? A. Well, he might do a little more in ten hours—I know he would.

Q. He might do a little more in ten hours than he would over there in the same time? A. Yes, sir.

Q. Now, as I understand you, you never made any expression of any kind to any member of the Board of Trustees, or the Secretary, or to Mr. Bryan, that you were dissatisfied with your wages or your work? A. I did not.

Q. If you had any dissatisfaction, it was not made known to them? A. Only in one instance, where we all expressed dissatisfaction, one evening, and quit work and demanded nine hours. There was a general dissatisfaction expressed, some reluctantly and some voluntarily.

Q. You speak of working eight hours; that has been the last week or two, hasn't it? A. Yes, sir.

Q. After the former committee of the Legislature was here? A. Yes, sir.

MR. DOBBIN: How long ago was it that the dissatisfaction of the bricklayers was expressed by quitting—do you remember? A. I can't remember when that was. It was after I had worked there some four or five weeks, I think.

Q. How long is it since you went to work there? A. I went to work there the third day of September.

Q. And some time after that the bricklayers expressed some dissatisfaction at working longer hours than the Constitution calls for? A. Yes, sir.

MR. LUSK: Was that made known to the Board of Trustees to your knowledge? A. Not that I know of.

MR. CAMPBELL: When the men struck who did they make known their grievance to? A. It was not made known until they struck.

Q. I said when they did strike? A. To the Superintendent.

Q. To the Superintendent? A. Yes, sir.

Q. What did he say to you, do you know? A. Well, I don't know much about it, because I walked off the building.

Q. You walked off the building? A. Yes, sir; I went away. There was others did more talking than I did.

Q. Now, you say that the day's work of a good bricklayer is about two thousand brick, while on this job you say that from five hundred to six hundred on one part of the work and about eight hundred on another part would be a day's work? A. Yes, sir.

Q. Is that all that a man would be willing to do, or forced to do, or compelled to do? A. That would be about all he would be justified in doing.

Q. By what rule do you govern your conscience when you say that? A. I should judge by the class of work.

Q. In what respect does the class of work on that building differ from work outside? A. Because it is solider and better filled with mortar.

Q. Is not all brick work supposed to be solid or to be cemented? A. It is supposed to be. It is not always the case.

Q. Is there any more solidity in that work than there is in this building we are now sitting in? A. Well, this one I don't know anything about. I built a house over here, and quite a number of other buildings around here.

Q. And I suppose it was done, as people say in a joke, as a person would put their clothes on with a pitchfork; that is, it would fall down before it was put up? A. Well, yes, sir.

Q. Well, is there any better class of work on the inside than there is on any building of equal size, or solidity? A. I think there is, pretty sure there is.

Q. Well, I will go over there again with you, if you will be kind enough to show me where it is? A. Well, on the surface it would not show so readily. You would have to tear a portion of it down.

Q. What width is the wall? A. Seventeen inches.

Q. Hollow wall? A. With a hollow; yes, sir. That would leave twenty-one.

MR. DAVIS: Let me suggest, that in a class of work of that kind there is a great deal more labor attached to it, with a hollow wall, than there is in a solid wall.

MR. CAMPBELL: Perhaps it was because the Superintendent did not make the men work enough, or does not know a full day's work, that you did no more work than that? A. I think he does.

Q. You think he does not want any more work done by the men? A. Sir?

Q. He doesn't want any more work done by the men than has been done? A. I think he has been perfectly satisfied. I never saw him urge a man to do a great deal of work, but what he did should be done well.

MR. LUSK: Mr. Knapp, you mean when the men worked over there, as I understand you, the men that worked on brick, the work they did was considered the work which had to be done on the building? It was a good, fair day's work? A. Yes, sir.

Q. And they would do a good day's work laying the number of brick you have mentioned per day? A. Yes, sir.

Q. And they laid all the brick that could be laid according to the character of the work? A. Yes, sir.

Q. And it is good work? A. Yes, sir.

Q. You don't mean to say that the Superintendent allowed the men to lay as little brick as they wished to? A. No, sir; I do not.

Q. But he would enforce them to lay it well? A. Yes, sir.

Q. Then he would allow them to lay as little brick as they wanted to, but it must be laid well; is that it? A. Yes, sir.

MR. MAHER: What is your opinion of the qualifications and skill of the majority of the bricklayers that worked on the building? A. Well, the majority of them were pretty fair bricklayers.

Q. Well, was there a respectable minority that were not good? A. Well, there were two or three that couldn't be called first class workmen; but then at the class of work they were employed at probably they would do as well as the others.

MR. BRYAN: Did I understand you to say that you belonged to the Bricklayers' Union? A. I did in 1866-67.

Q. Now, you have worked on that building nearly all the time the brick-work was built; did you notice if the Union bricklayers laid more brick than the scabs? A. Well: I don't think they did.

Q. Were they better bricklayers; did they do better work? A. Some of those who belonged to the Union were really inferior workmen, while others were good workmen.

Q. Is it not a fact that with one or two exceptions the best work was done by up-country men? A. That is the fact.

MR. CAMPBELL: Did you ever notice the Superintendent or Foreman urge the men; finding fault with them for not working more? A. No, sir.

Q. Never urged them; never found any fault? A. I never heard it, although I believe there was some fault found; that they were not doing enough; but to hear it with my own ears I never did.

MR. DOBBIN: In reply to the question, Is it not a fact that the better class of work on the institution was done by up-country men? you answered yes. Well, is it the fact that the poorer class of work—is it a fact that they were first-class workmen and could get work in the southern part of the State or around San Francisco? A. Well, they would probably get some work; but they wouldn't be considered first-class workmen. There are some men from the lower part of the country that I guess are Union men, too—good men.

MR. CAMPBELL: You stated in the early part of your testimony, you recollect, that you would have asked for a reduction of the hours but you were afraid that you might lose your position, or something tantamount to that—you might be injured by doing so? A. I felt satisfied I would be told "no."

FRED. PFEIFER.

Sworn.

MR. CAMPBELL: What is your occupation? Answer—Bricklaying.

Q. Have you ever worked on the State Normal School at Chico? A. Yes, sir.

Q. About how long? A. Well, I think about one hundred days. I have worked on it something near that.

Q. About one hundred days. What pay did you receive? A. I received \$5 a day.

Q. Five dollars? A. Yes, sir.

Q. Did you work—how many hours did you work in a day? A. Well, we worked ten hours a day, and when it grew dark before six o'clock in the evening we worked until dark—nine and a half, nine and three quarters. I don't know; something like that.

Q. The time that you worked there did you ever hear any dissatisfaction expressed at being required to work ten hours a day on the building? A. Well, sir, I heard some of it, and some of them one day—I was sick that day and was not at work—they struck and wanted to work nine hours a day.

Q. How do you know that they did ask? By the men telling you, by common rumor? A. Yes, sir; by the men, by some of the bricklayers telling me so.

Q. Did that all spring up in a minute or was it a common feeling? A. Well, there was a little talk about it before, but it didn't amount to much.

Q. It amounted to so much that at the time you were sick they all struck? A. Yes, sir; they all struck.

Q. Well, if you had been there would you have joined the strike? A. Well, I think so; I don't know.

Q. Well, at the time that this affair occurred, why was it that it did occur? A. Well, they expected to work for the State eight hours a day. Of course there was some kick. They wanted to work eight hours a day if they could, but there was some men come here and worked in our places for ten hours a day, so we worked ten hours a day.

Q. Do you think you could get bricklayers to work ten hours a day? A. Yes, sir; they could.

Q. They did? A. Yes, sir.

Q. From where did they come? A. From San Francisco, some of them.

Q. And worked ten hours a day? A. Yes, sir.

Q. Why, then, didn't you make your dissatisfaction known to the officers in charge of the work, or to the Superintendent? A. Well, as far as I know—I am a German, and am not able to speak the language very correctly, anyhow, and I thought there was some men would come—I thought there was some men here could talk better than I could, around here, and I would let them talk.

Q. You thought that silence was a virtue, then, so long as you could not talk well? A. Yes, sir.

Q. But all that time you thought the law was not being carried out? A. Yes, sir; and some of them told me about it, but I didn't kick, because I would be discharged if I would kick.

Q. You were always dissatisfied, because you knew that the law was not being carried out? A. Yes, sir; that is what I heard from a great many of the men.

MR. DAVIS: Which did you think was to blame, the law or yourself? A. Well, I worked. I have a family to take care of and make a living for.

MR. CAMPBELL: You were dissatisfied, but you were afraid to make your dissatisfaction known? A. Yes, sir.

Q. During the time that you worked on the building did you ever know of anybody to give, or say that they gave, anything to any of the officers connected with the management of the construction of the building, or to the Superintendent? A. No, sir.

Q. And you always believed that every person working on the building received all his pay that was charged to his account on the books? A. Yes, sir.

Q. And there was no deduction for any purpose whatever? A. Yes, sir.

Q. You know so in your own case? A. Yes, sir; I know so in my case.

Q. And you never heard anything contradictory of that from anybody else? A. No, sir; I never heard anybody say he had to pay anything; never did hear that.

Q. Belong to any Trades' Union? A. I used to belong to a Union in 'Frisco.

Q. How long ago? A. That was in 1883, I believe; 1884—I don't know; 1884, I think. I got a card home.

Q. Do you know what hours they worked, the men belonging to that Union? A. Down in 'Frisco they worked nine hours.

Q. Do you know what pay they get? A. Well, five and a half a day there.

Q. Do you know what work they usually do on a contract building in San Francisco, how it compares with the work done in outside places—the same class of work? A. Well, I believe they do just as much here as they do down in 'Frisco. I have worked there, and I never worked any harder than I do here.

Q. The average class of mechanics who worked on the State Normal School, were they all first class? A. Yes, I think they were all first class bricklayers; yes, sir.

Q. All first class? A. Yes, sir.

A. HONORO.

Sworn.

MR. CARPENTER: What is your occupation? Answer—Carpenter.

Q. Have you worked on the State Normal School at Chico? A. Yes, sir.

Q. And about how long have you worked there? A. Well, I worked two hundred days, or something like that, I believe—in or about—perhaps a little more. I don't know just exactly.

Q. What wages did you receive? A. Three dollars and fifty cents.

Q. What were the hours that you were required to work? A. Ten hours.

Q. You were required to work ten. Did you work less or more at any time? A. Well, I worked less.

Q. About how much less? A. Well, we worked through the winter at the rate of nine or nine and a half hours.

Q. Ever work less than nine? A. Not until the last two weeks.

Q. And you worked eight hours in the last two weeks? A. Yes, sir.

Q. Did you find at that time, when you were working nine or nine and a half hours, and ten, was there any difference in your pay? A. No difference in the pay.

Q. No difference? A. Same pay.

Q. Were you always satisfied to work ten hours a day for \$3 50 on that work? A. Well, I couldn't say; but those were the hours we always worked here.

Q. Sir? A. It is the same hours we always worked on any other job.

Q. You were perfectly satisfied? A. Satisfied? Of course.

Q. I ask you if you were perfectly satisfied? A. Yes, sir; I was satisfied with it.

Q. You were perfectly satisfied. Did you hear any dissatisfaction during the time that you worked there about being compelled or required to work ten hours a day, or nine hours a day, on the building among the workmen, any class of workmen, bricklayers, hod-carriers, concretors, or any other class? A. Well, I couldn't say whether it was dissatisfaction. I heard some talk about it.

Q. Well, what was the talk? A. They talked about working more hours than the law required.

Q. And yet you were perfectly satisfied to work more hours than the law required you to? [No answer to last question.]

GEORGE HARNEY.

Sworn.

MR. CAMPBELL: What is your occupation? Answer—Painter.

Q. Have you worked on the State Normal School at Chico at any time since it was commenced? A. Yes, sir.

Q. How long or about how long have you worked there? A. Well, I haven't got the time book with me. Two or three weeks. I don't know exactly how long it was.

Q. You only went to work recently? A. Recently, yes, sir.

Q. Have you heard of any dissatisfaction amongst the men for working more hours, or have you heard any dissatisfaction expressed at the number of hours the men were required to work each day? A. No, sir.

Q. Never heard any dissatisfaction? A. No. I was off by myself much of the time.

Q. Were you perfectly satisfied with the number of hours you had to work? A. Yes, sir.

Q. You believed that the law was carried out? A. I didn't know anything about the law, what the law required.

Q. You have only worked there two or three weeks and that is recently? A. Yes, sir.

Q. Then you say you have always been principally by yourself, and did not have any conversation with the other men? A. Yes, sir.

HERBERT AVERY.

Sworn.

MR. CAMPBELL: What is your occupation? Answer—Carpenter.

Q. Have you ever worked on the State Normal School at Chico? A. Yes, sir.

Q. About how long. A. I think some time in July, I believe; I couldn't say exactly.

Q. You worked there since July all the time? A. Yes, sir; with the exception of a day or so.

Q. What rate of pay do you get? A. Thirty-five cents an hour.

Q. Are you employed by the day or hour? A. I don't know, by the day or the hour.

Q. You don't know whether you are employed by the day or by the hour? A. I work ten hours.

Q. That is not the question I asked you. A. Well, by the day, I suppose.

Q. Then you get \$3 50 a day in place of 35 cents an hour? A. Yes, sir.

Q. Were you ever asked to work by the hour? A. No, sir.

Q. Did you ever hear of any one else who was asked to work by the hour? A. No.

Q. Did you ever hear of any dissatisfaction existing amongst the men because they were required to work ten hours a day? A. No, sir.

Q. You never did? A. No, sir.

Q. Never heard of any strike among any class of mechanics on the building? A. No, sir.

Q. Never heard of any? A. No, sir.

Q. How many hours—have you worked ten hours continuously, or was there any difference in the time you worked? A. Oh, yes; in the winter time we wouldn't work much over eight hours.

Q. Did you get as much pay for the days that you worked only a little over eight hours as you did when you worked ten hours? A. Yes, sir.

Q. No difference in the pay? A. No, sir.

Q. Do you know of anybody who stated, or do you know of your own knowledge, that any person connected with the building as Superintendent or otherwise, ever received any consideration for giving men work, or keeping them at work? A. No, sir.

MR. DOBBIN: Do you know of any person employed on the building as a skilled mechanic, when in fact they were only laborers? A. No, sir.

Q. You don't know of any one being taken from General Bidwell's ranch and given a hatchet or axe, and told to put lathes on the building? A. No, sir; I do not know of any.

MR. CAMPBELL: Is there more than one class of carpenters working there? A. Not that I know of.

Q. All the carpenters working there are getting the same rate of pay? A. Well, that I couldn't say. I don't believe I ever heard any one say what they were getting.

THEODORE RINEHART.

Sworn.

MR. CAMPBELL: What is your occupation? Answer—I am a carpenter.

Q. Have you ever been employed on the State Normal School at Chico? A. Yes, sir.

Q. About how long have you been there? A. I think it was a little over a year ago the first work I done, and then there was a little time I was off. I probably worked between two and three hundred days.

Q. About a year? A. Hardly a year. No, sir; not quite a year.

Q. What pay do you receive, Mr. Rinehart? A. Four dollars a day. There was a few days on the first that I only got \$3 50, but the greater part of the time I got \$4.

Q. Generally paid \$4? A. Yes, sir.

Q. How many hours a day were you required to work? A. Most of the time we worked ten hours.

Q. What hours were you required to work other days? A. Well, nine or nine and a half.

Q. Do you know why you have been required to work ten hours and nine and nine and a half hours? A. Why we were required?

Q. Yes, sir? A. Well, I do not, only that was the rule on that job.

Q. Were you a foreman on that building? A. No, sir; I don't know that I was, although I had charge of the men when the Superintendent was gone many times.

Q. Have you always been satisfied to work ten hours a day on the building? A. Yes, sir; I was satisfied.

Q. You believed that you were justly treated and dealt by in being required to work ten hours? A. Of course I understood on State work that eight hours was a day's work; but then the rule here was given us for ten hours, and I worked ten hours.

Q. Do you know who made the rule to work ten hours? A. I don't know, sir.

Q. You do not know who made the rule? A. No, sir.

Q. Did you ever hear of any dissatisfaction amongst any class of workmen on that building as to the hours they were required to work? A. Oh, I heard them talk about it many times, yes, sir.

Q. Did they ever make any complaint to you or to the Superintendent about it? A. No, sir; not directly to me, or him that I know of.

Q. Did you ever know of any strike to have occurred on the building? A. I did.

Q. And who did they make their grievances known to when they struck? A. Well, I think to the Superintendent, as he was there.

Q. Do you know what was done in that case? A. Well, I think they came back and went to work again.

Q. Did they have their grievances adjusted? A. Not that I know of.

Q. They went back on the same terms that they had when they struck? A. Yes, sir; I think so, so far as I know.

A. J. BRYAN.

Recalled.

MR. CAMPBELL: When the men struck—the bricklayers, as I understand, struck for other terms than what they were then receiving—did they make their complaint known to you? Answer—They did not. There was no individual of the crowd nor any delegation, as far as I remember, that made any statements about it. There was about half the number that quit when they come down from the building and simply told me they quit because the other men quit. I was told that the men had not agreed on any line of action, so they couldn't do anything.

Q. They all went back? A. The only conversation we had particularly about it was the next morning, about coming to somebody and making known their grievances. When they quit they left a lot of mortar mortifying on the boards without any one knowing anything about it, but there was no delegation or any individual that I remember said anything to me about it except the next day, and then they hadn't agreed on any line of action. It seemed they had started up to do something, but they couldn't agree to anything. They neither came to me with any request as a body or otherwise.

Q. They simply went off of their own accord and left the material there on the boards? A. Yes, sir.

Q. And then came back to work the next morning? A. They all came to the building the next morning, I believe; the entire lot.

Q. And you allowed them all to go to work? A. Not all of them. A statement had been made that there had been a few outside men trying to get the men to strike on the building ever since the work was started, and there was one or two men told me they wanted to go north.

Q. About how many of them did you lay off? A. About three quit, I think.

Q. Did they quit of their own accord or did you make them quit? A. There was one, I believe two, quit; one I discharged. I discharged him simply because he was a quarrelsome fellow, and I didn't need any more men particularly.

Q. You believed that he was trying to get the other men to quit? A. The statement was made frequently that there was an attempt to make trouble among the men on the building, and this man was the one I heard mentioned in connection with the matter.

Q. On what grounds, did you hear, was he trying to start the trouble? A. I never heard any explanation. I expect they would meet together down town and talk about it.

Q. Well, what appeared to be the complaint? A. I never heard what the complaint was. Some were talking about time and others about wages, and so forth, but there was never any delegation waited on me or the Trustees, so far as I know, to make any complaint. There was a good deal of talk about it the next morning though, especially about the mortar being left at the building.

Q. Well, you laid one man off and two quit? A. I think there were three out of the party that quit.

Q. Then if you were not acquainted with the action of this man, as to what he was doing, why was it necessary to discharge him? A. Simply because he had been coming around full of whisky. That is, in a condition that he was hardly able to do his work. I had been thinking of discharging him.

Q. Why didn't you discharge him? A. Well, simply because bricklayers were scarce; it was difficult to get bricklayers, and I suppose I was not quite strict enough to discharge a man because he was, I will say, slightly under the influence of whisky.

Q. Do you know where this man is now? A. I do not. He was from Oakland, or rather Jack Metzger telegraphed before the man came here to know if I needed any men, and to learn the wages paid. I always supposed Jack sent the man here from Sacramento.

Q. What is his name? A. I don't know that I can remember his name. By referring to the payroll I can get it. He is an Oakland man, but was sent here, as I always understood, by Jack Metzger, foreman of the railroad shops in Sacramento. His name was Alsop—Robert A-l-s-o-p.

MR. MAHER: Is there any paper in your possession to show when the time was changed from nine to ten or half-past nine at any time during the work on the building? A. No; except when we changed to eight hours a short time ago.

Q. Nothing to show now when there was any change made between nine and ten? A. No, sir. We just dropped off as the days shortened. There is nothing on the time book which will show the exact time.

MR. LUSK: You could tell by the calendar.

THEODORE RINEHART.

Recalled.

MR. LUSK: How long have you lived around here? Answer—Twenty-eight years.

Q. Did you know all those men working on that building as carpenters? A. Most of them; not all.

Q. Were there any common laborers taken from General Bidwell's ranch and given carpenter work and paid carpenter's wages? A. No, sir; there was not.

Q. You have been a carpenter all your life? A. Yes, sir.

Q. What is the character of the work done on that building as regards being good or bad? A. It is very good.

Q. I am referring now to the carpenter work? A. Yes, sir.

T. P. HENDRICKS.

Sworn.

MR. LUSK: You are one of the Trustees of this Normal School are you, Mr. Hendricks? Answer—Yes, sir.

Q. Was any complaint ever made to you by any of the men that ever worked on that building as to being dissatisfied with the wages paid, or the hours of labor worked, or any treatment of the Superintendent? A. No, sir.

MR. CAMPBELL: Mr. Hendricks, you are one of the Directors of the Normal School located here? A. Yes, sir.

Q. Have you exercised any supervision over its management or construction? A. Well, no, sir; not further than—no, I have not.

Q. Then how could you have ever known anything about it? How could you have known what might have occurred if you exercised no jurisdiction or control over its management? A. I was asked if any man employed on that building had ever made any complaint to me as to his hours, wages, or general treatment. My answer was “no.”

L. H. McINTOSH.

Sworn.

MR. LUSK: You have been a Director since the school was organized? Answer—Yes, sir.

Q. During the construction of that building you have been frequently there? A. Yes, sir.

Q. Has any man ever employed on that building ever expressed any dissatisfaction to you as to the hours of his labor, his wages, or the treatment of the Superintendent towards him? A. No, sir.

MR. CAMPBELL: Have you ever heard that any of the men were dissatisfied? A. Yes, sir; I have.

Q. Who gave you the information? A. The Superintendent told me that there had been a little strike on the building, last fall, I believe.

Q. Were you ever at a meeting of the Board of Directors at which the hours of labor was discussed? A. Yes, sir.

Q. Will you state what was said at that meeting? A. At the meeting I had reference to, when we took charge of the work, we had agreed to pay the men 20 cents an hour, for common laborers.

Q. That was discussed at the meeting of the Directors? A. Yes, sir.

Q. Was the Superintendent present? A. I think he was. He was notified of it.

Q. Then, at that meeting, you established in your own mind, and as a governing rule of your action during your supervision of the construction of that building, that the men should be employed by the hour? A. That was the understanding at that time; the common laborers; yes, sir.

Q. Why by the hour and not by the day? A. Well, the men were at work there, as I understood— General Bidwell had some men there before we took charge of the work, and they were working for \$1 50 a day. I don't know exactly what they were getting, but we talked it over and concluded to pay them 20 cents an hour.

Q. Did you know at that time that there was a law in the statute book and also a clause in the Constitution providing that eight hours was a day's work? A. Yes, sir: I knew that there was such a law of that kind, although I didn't know exactly what it was. I did not understand that they could not work longer.

Q. And was it not for the purpose of getting around that clause in the Constitution and the Act in the Political Code that the men were to be paid by the hour instead of the day? A. No, sir. As I understand, the men would rather put in ten hours and get paid for ten hours than to work eight hours and be paid for working eight hours, but we gave them the privilege of working longer hours if they wished.

Q. When did you give them that privilege? A. It was understood that the Superintendent from that time was to pay them by the hour.

Q. If they worked eight hours, you would pay them for eight; if they worked ten, pay them for ten? A. Yes, sir.

Q. Now, it was at that time that you established that rule? A. Yes, sir.

A. BYTTON.

Sworn.

MR. DOBBIN: What is your occupation? Answer—Well, I do carpenter work.

Q. Have you been employed on the Normal School? A. No, sir.

Q. Not at all? A. No, sir.

Q. Do you know anything about that institution? A. No, sir; not particularly. I have been there two or three times.

Q. You know it is there? A. It is there; yes, sir.

Q. Well, are you personally acquainted with any of the employés, any one who has been working on the institution? A. Well, I have seen several of them; yes, sir.

Q. With any of those you have seen, have you ever had any conversation with them in reference to the hours of labor and the pay, and so forth? A. Not particularly; no, sir.

Q. Did you ever hear any of the employés on that building say that they had paid a bonus to obtain a situation there? A. Never did; no, sir.

MR. CAMPBELL: Did you ever tell anybody that you did know it? A. Not that I recollect of. No, I don't think that I ever did.

J. M. GUGGER.

Sworn.

MR. CAMPBELL: What is your occupation? Answer—Carpenter.

Q. Have you ever worked upon the Branch State Normal School at Chico? A. Yes, sir; I have.

Q. You have worked there? A. Yes, sir.

Q. What pay did you receive? A. Three dollars and a half a day.

Q. What hours did you have to work? A. Well, sir, when I first went to work there we worked ten hours, I believe, as near as we could.

Q. You got \$3 50 and worked ten hours. Did you ever work less or more? A. Never worked more. Worked less than that when the days were short.

Q. When the days were short? A. Yes, sir.

Q. About what time, then, did you work—as low as nine? A. Yes, sir; a little less sometimes. I never paid much attention to it.

Q. Who made the order to go to work, and who gave the order to quit; does a bell ring? A. We usually went to work by a whistle—we usually went to work by the whistle of the waterworks.

Q. Did you always get the same pay for nine hours as you did for ten?
A. Yes, sir; I never worked for less than \$3 50 a day.

Q. Do you know of any carpenter working for less than \$3 50? A. No, sir; I never asked any man what he was getting on the job.

Q. Nor ever told any one what you were getting? A. I don't remember that I did. If any one asked me I would certainly tell him.

Q. Do you know of any reason to complain as to treatment you get, the hours you work, and the treatment you receive? A. No, sir.

Q. You never heard any dissatisfaction amongst the men? A. Not a bit.

Q. Did you know that there was an eight-hour law and that it only required eight hours for a day's work? A. I heard the question asked several times.

Q. But never answered satisfactorily? A. No, sir.

Q. Did you elect to work eight hours or ten, or were you asked to work eight or ten? A. That question was never put to me at all. I went to work there.

Q. Went to work and were willing to work so long as the other men alongside of you were working? A. Yes, sir.

Q. Have you ever heard it rumored, or do you know of your own knowledge to be the case, that any person connected with the management, either the Superintendent, any of the Directors, or any person in any other capacity having received any bonus or compensation for giving work or keeping men at work after they went to work? A. No, sir; never heard anything of the kind.

Q. Of your own knowledge you know nothing of it? A. Nothing at all.

WILLIAM DAY.

Sworn.

MR. CAMPBELL: What is your occupation? Answer—Bricklayer.

Q. Have you ever worked on the State Normal School at Chico? A. Yes, sir.

Q. How long have you worked there? A. Well, I have worked there quite awhile. I commenced along about the first she started.

Q. What hours did you generally work there? A. Well, I started in on ten hours.

Q. What pay did you receive? A. Five dollars.

Q. Did you work less hours or more than ten? A. We worked less.

Q. Get the same pay for less hours that you did for ten? A. Yes, sir.

Q. The same pay? A. Yes, sir.

Q. Did you ever hear of any dissatisfaction or know of any dissatisfaction having existed amongst the men about being required to work ten hours a day or nine hours a day, instead of eight? A. Oh, well; nothing more than when they were together they all seemed to think eight hours was all they had to work, or something of that kind. Just a general talk amongst the men.

Q. Do you believe that the men were satisfied? A. Well—

Q. Were you satisfied yourself? A. Well, I was satisfied—yes. I had either to work for the wages or quit.

Q. That is not the question I asked you. Were you satisfied—you, yourself—with having to work ten hours a day? A. Yes, sir.

Q. You were perfectly satisfied? A. Yes, sir; of course I was, if all the rest of them was. I would do what the rest done; if they worked ten hours, I would work ten hours.

Q. Then, might I ask you this question, Was it because you were required to work ten hours, or because the other men worked ten hours, that you were satisfied to work ten hours? A. Well, they was working ten hours when I went there, and I never—they worked ten hours, and I worked with the rest of them.

Q. Were you on this strike that occurred one certain day? A. Yes, sir.

Q. Then being on that strike would indicate that you were not exactly satisfied with working ten hours a day? A. Not any more than any of the rest of them.

Q. What did you strike for? A. Well, they didn't seem to want to work ten hours; wanted to quit at five o'clock; they all agreed to it; I done the same as the rest.

Q. Did they make any complaint to any of the officers in charge of the building, or to the Superintendent? A. No, sir; I don't think so.

Q. Did they seem to have any spokesman, any one with more courage than the others, to go and speak to him? A. No; they worked until five o'clock and simply climbed off the scaffold, and some did not.

Q. Well, now, wasn't it the fact that they were all afraid to speak to the Superintendent to make any complaint known to him? A. Well, I suppose they was.

MR. DOBBIN: Subsequently to the strike were the hours of labor reduced on the building? A. No, sir.

Q. The strike availed nothing, then? A. No, sir.

Q. Do you know if the attention of the Board of Directors was called to the hours of labor exceeding the constitutional limit? A. No, sir.

MR. CAMPBELL: Did all these men go back to work that struck? A. Well, I think all of them except three of the parties. I was one of the men that was laid off for awhile; I think there was only three of them didn't go back; I was one of them.

Q. You did not go back? A. Not for a couple of days.

Q. How long did you stay off? A. Two days.

Q. You were not the one that the Superintendent laid off? You stopped off of your own accord? A. No, sir; he told me I could lay off until I could think the matter over and understand the thing. He seemed to think I had something to do with it, but I told him I didn't have anything to do with it, and I laid off two days.

Q. Then he kept you off, although you were no more guilty than the others? A. Yes, sir.

Q. And when he found you were as innocent as they were he let you go back? A. Yes, sir.

Q. He kept you out for three or four days? A. Two days.

Q. Then what became of the other men; were they allowed to go back? A. No, sir; they both went away.

Q. They both went away? Did they go away of their own accord or were they compelled to go away? A. No, I don't suppose—they both got up and left.

Q. Did either one or both of these men, were they in the habit of drinking so as to be intoxicated? A. One of them was; I don't think the other was.

Q. One of them was, but don't think the other was. Well, was that the ringleader of the strike? A. The ringleader; I never saw him to know him in my life.

Q. You never saw the ringleader? A. Not that I know of.

Q. That was the man who had the moral courage. Now, in all the time that you have been working there and living around Chico, have you ever

heard it rumored, or do you know it of your own knowledge, that any person connected with the management of the construction of that building, either as Superintendent, Director, or in any other capacity, ever received anything? A. No, sir.

Q. In the way of compensation to put men at work, or to keep them at work after they were at work? A. No, sir.

Q. Perfectly satisfied on that? A. I am on my part.

Q. You never heard of it? A. No, sir.

MR. DOBBIN: Did you ever hear of any material being used in the construction of the building on which Chinese were employed in the making? A. No, sir.

Q. Never heard that mentioned? A. No, sir.

C. F. MUNSEY.

Sworn.

MR. CAMPBELL: What is your occupation? Answer—Day laborer.

Q. Have you ever worked upon the State Normal School? A. Yes, sir.

Q. How long? A. I could not say how long. I didn't keep the time exactly.

Q. About how long; we are not particular? A. Probably two or three weeks.

Q. What wages did you receive at that time? A. Dollar and a half a day.

Q. What hours did you have to work? A. Went to work at seven o'clock, and quit at six.

Q. Ten hours; all the time you worked there? A. Yes, sir.

Q. What did you leave there for? A. Well, I understood that I would be discharged if I didn't leave, so I quit before I was discharged. I don't know whether there was any truth in it or not—just some conversation among some of the workmen.

Q. What made you think that? Had you done anything, or had anything been said about it? A. Yes, sir. I wrote a letter to Ira G. Hoitt, Superintendent of Public Instruction, at Sacramento.

Q. You wrote a letter to him? A. Yes, sir.

Q. To what did your letter relate? A. Well, I think I asked him in the letter—the purport of the letter was in regards to whether the State allowed so much wages or whether the State allowed ten hours for a day's work. I have the answer in my pocket. You can tell what he wrote back to me. [Witness produced letter referred to, which Mr. Campbell read as follows:]

STATE OF CALIFORNIA, DEPARTMENT PUBLIC INSTRUCTION, }
SACRAMENTO, October 29, 1887. }

CHARLES F. MUNSEY, Esq., Chico, California:

DEAR SIR: Yours of the twenty-sixth instant is before me and at once noted. The matter of going ahead with the work on the Normal School at Chico was left by the Trustees to a committee composed of Chico members. I am not aware that there is any price fixed by the State or its Legislature as to State wages. The Legislature appropriated \$50,000 with which to erect the Normal School at Chico. The matter of employing help is entirely with the Chico Board, only they must not overreach the appropriation. They fix the prices they can afford to pay, but they cannot oblige any one to work for such prices unless he chooses to do so.

What are the prices usually paid to day laborers in the fall and winter at Chico and vicinity? I should think that the ruling rates paid in Chico and vicinity would have much to do with the Board or committee in fixing the pay at the Normal School. They certainly ought not to pay more than a private individual, nor, in my opinion, should they pay less.

Yours sincerely,

IRA G. HOITT,
Superintendent of State.

P. S.—If you are working under or for a contractor, then you will get what he agrees to pay you and what you agreed to work for. In such cases the Board does not control the wages.

I. G. H.

MR. CAMPBELL: That was the answer you got to that letter you wrote to Mr. Hoitt? A. Yes, sir.

Q. Then how did anybody know that you had written the letter to Mr. Hoitt? Did you tell anybody? A. There was several parties that I showed the letter to before I signed it, or one or two parties at least.

Q. You were getting \$1 50 for ten hours at that time? A. Yes, sir.

Q. And you wrote to Mr. Hoitt to inquire if that was regular or State wages, and you got that answer? A. Yes, sir.

Q. Then how can you know, or can you establish the fact, that you would be discharged if you tender your own discharge, on account of having written that letter? A. No; I could not say that I would have been discharged, although I was told to go to work the next morning. After I wrote the letter I heard General Bidwell say that whoever wrote the letter he would discharge him. He was talking with other parties at the time, wasn't talking to me, but I overheard that remark. I don't know whether he referred to the letter I wrote or somebody else's letter, or what letter he referred to, but that was the language he used, I think.

Q. You do not know then that General Bidwell in that conversation or remark that you say you overheard referred to your letter? A. No; I couldn't say.

Q. He may have referred to a letter from somebody else? A. Certainly.

Q. Have you ever worked on the building since? A. No, sir.

Q. Have you ever made application for work there since? A. I believe I did.

Q. Who did you make application to? A. I think I wrote a letter to Mr. Bryan asking him if there was a vacancy if I could go to work.

Q. Who is the person who usually takes on the men—Mr. Bryan? A. I suppose so. He was the man I went to work under.

Q. How long have you lived in Chico? A. I have lived here off and on for over a year.

Q. You never made application to Mr. Bryan for work after you left? A. I wrote him a letter; yes, sir.

Q. You wrote him a letter? A. Yes, sir.

Q. Did he ever answer your letter? A. No, sir; if he did I never got it.

Q. Why didn't you make personal application? A. Because I was busy at the time and hadn't time to go and see him. I was working at that time and couldn't see him on the street, so I just dropped him a note to the office.

Q. Did you ever hear that any person ever gave anything for getting work? A. No, sir.

Q. You never heard that any person ever gave anything for retaining work after they went to work? A. No, sir; I never did.

FRANK CLEVELAND.

Sworn.

MR. CAMPBELL: What is your occupation? Answer—Well, last two or three years I have been doing different jobs—one thing and another.

Q. Have you ever worked on the State Normal School? A. Yes, sir.

Q. In what capacity? A. Well, wheeling brick, building scaffolds—different things.

Q. What pay did you receive? A. Two dollars a day.

Q. How long did you work there? A. Well, I don't recollect just exactly. I guess about eight or ten days.

Q. How many hours a day did you work? A. Ten hours.

Q. Did you leave of your own accord? A. Yes, sir.

Q. You did leave of your own accord? A. Yes, sir.

Q. Ever ask for work since you left? A. No, sir.

Q. Were you dissatisfied with the work? A. No, sir.

Q. Dissatisfied with the hours? A. No, sir.

Q. Do you know of anything or of any irregularity going on that you wish to tell the committee? A. No, sir; I do not.

Q. Ever hear of any? A. No, sir.

MR. DOBBIN: Did you ever hear of any grievance or imaginary grievance that the bricklayers had on that building? Did you ever hear them discuss among themselves that the State law was being violated as to hours of labor? A. No, sir.

Q. Do you know anything about a little strike they had, or were you employed on the building at that time? A. I guess not.

Q. You are positive you never heard of anybody paying money to receive a position there, and paying money to retain the position after they had secured one? A. Never heard of anything of the kind.

F. C. LUSK.

Recalled.

THE WITNESS: In reference to this letter of Mr. Munsey's that he wrote Mr. Hoitt, my remembrance is that Mr. Hoitt sent that letter to me as President of the Board. It is possible that he may have written me only the substance of the letter, and showed me the letter at Sacramento, but at any rate he called my attention to it. It did not refer to hours of labor. He wanted to know if \$2 was not the State wages. Upon that letter being called to the attention of the Board it was discussed, and there was no thought or disposition on the part of any of us to discharge Mr. Munsey, but that it was a thing which he had a perfect right to do. As to the statement he attributes to General Bidwell, that he would discharge the person who wrote that letter, that I don't know anything about. I do not think he did, however, because such an expression would not be in consonance with the discussion we had in the Board.

There has never been a disposition on the part of any of the members of this Board to jew down the men. We simply supposed that if these men living up here were willing to work the usual number of hours at a rate per hour which would make up their usual pay, that it would surely be satisfactory to all.

And I never heard of this strike until to-day. And we never ordered the discharge of any man from that building. Such a thing never occurred in the Board.

TESTIMONY CLOSED.

MR. MAHER: I move you, sir, that the thanks of this committee be extended to Mr. Lusk for the use of his private office during our investigation.

Motion carried.

On motion of Mr. Maher, committee adjourned to meet at the call of the Chair.

UNIVERSITY OF CALIFORNIA—COLLEGE OF AGRICULTURE.
AGRICULTURAL EXPERIMENT STATION.

REPORTS OF EXAMINATIONS
OF
WATERS, WATER SUPPLY,
AND RELATED SUBJECTS,
DURING THE YEARS 1886-89.

By E. W. HILGARD,
Professor of Agriculture and Director of the Station.

ADVANCE SHEETS FROM THE COMBINED REPORTS FOR 1888 AND 1889.



SACRAMENTO:

STATE OFFICE, : : : : J. D. YOUNG, SUPT. STATE PRINTING.
1889.

TABLE OF CONTENTS.

	PAGE.
INTRODUCTORY NOTE.....	7
CIRCULAR CONCERNING ANALYSES OF WATERS.....	9
THE SOFTENING OF HARD WATERS FOR DOMESTIC USE.....	11
ANALYSES OF WATERS.....	13
<i>A. Common Wells</i>	13
From St. Helena; L. Zierngibl	13
From Mission Hills, San Francisco; B. Strozynski.....	13
From North Berkeley (tank water); Dr. M. C. O'Toole	14
From North Berkeley (creek water); same.....	14
From North Berkeley (well water); same	15
From Saratoga, Santa Clara County; G. E. Pinder	15
From Saratoga, Santa Clara County; G. E. Hyde	16
From San José; P. O. Burns Wine Company (well water).....	16
From San José; P. O. Burns Wine Company (boiler water).....	16
From San José; P. O. Burns Wine Company (spring water)	17
From Fresno; Thomas E. Hughes	18
From Polonio Pass; John R. Carr	18
From Alpine Station, Los Angeles County; H. Slotterbeck.....	18
From Fulton Wells, Los Angeles County; W. F. Nimmocks	19
From Riverside; Henry Jarecki	20
From San Bernardino; Mrs. C. M. Davis.....	20
From Alturas Ranch, San Diego County; Cave J. Coutts	20
<i>B. Spring Waters</i>	21
From Paradise, Butte County; Irving A. Coonradt	21
From Oakville, Napa County; John Benson	22
From Vacaville; J. R. Collins.....	22
From Applegate (Oakland ranch), Placer County; A. T. Perkins.....	22
From Livermore Mountains; M. M. Mendenhall.....	23
From Los Gatos; F. H. McCullagh.....	23
From Skyland, Santa Cruz Mountains; Augusta C. H. Weber.....	24
From Hollister, San Benito County; James McMahon	24
From Bryson, Monterey County; D. Sturges.....	25
From Coulterville, Mariposa County; Philip Hope.....	25
From Camulos, Ventura County; D. C. Cook	25
From Coast Range foothills, Tulare County; L. L. Robinson	26
<i>C. Mineral Waters</i>	26
From Mt. Lassen Springs, Plumas County; E. R. Drake.....	26
From Sonoma Hot Springs, H. E. Boyes	27
From Samuel's Napa Soda Springs, Napa County	27
From Milton, Calaveras County; George W. Gilmore	28
From Ojai Hot Springs, Nordhoff, Ventura County	28
<i>D. Artesian Waters</i>	28
From Beckwith, Plumas County; Thomas Black	28
From Patterson's Landing; William Ryan.....	29
From Borden, Fresno County; A. L. Sayre.....	29
From Carpinteria, Santa Barbara County; T. W. Ward.....	30

	PAGE.
From Carpinteria; P. C. Higgins	30
From "The Palms," San Diego County; Howard & Atwater	31
<i>E. River and Irrigation Waters</i>	31
From Carmel River, Monterey County; ———	31
From Owen's River, Independence Station; Emmet Rixford	32
THE WATER SUPPLY OF THE SAN BERNARDINO VALLEY	32
The upper San Bernardino Valley	32
Cienegas	33
Flood plain of the Santa Ana River	33
<i>The Victoria Ciénega</i>	33
Development by Mr. Matthew Gage	33-34
<i>Surface and surface waters</i>	34
Natural springs	34
Origin of Warm Creek	34
<i>Artesian Wells</i>	35
Materials penetrated	35
Proper size of pipes	35
<i>Details of water discharge</i>	35
Group "A"	36
Group "B"	36
Group "C"	36
Group "D"	37
<i>Interdependence of these Wells</i>	37
Experiments on mutual interference	37-38
"Local Head"	38
THE SUBSTRATA OF THE VALLEY	39
<i>Source of the Water Supply</i>	39
Absorption of water at mouth of cañon	40
Cobble beds of Santa Ana and Mill Creek Cañons	40
No gravel from San Timoteo Cañon	40
Smaller affluents—Plunge, City, and Lytle Creeks	40
<i>Possible Production from a given Area</i>	40
Coincident of ancient and modern channels	41
Was there a stream down the main valley	41
<i>Chemical Composition of the Waters</i>	42
Table of Analyses—Artesian Wells, Warm Creek ..	42
Small amount of Mineral Salts	43
Importance of Potash contained; value of same	43
<i>Cienegas of the Chino Ranch and Pomona Slope</i>	43
THE LAKES OF THE SAN JOAQUIN VALLEY	44
Rapid Evaporation	44
<i>Condition in 1880</i>	44
Dying of Fish in Kern Lake	44
Buena Vista Lake	44
Tulare Lake	45
Comparative Analyses of Waters	45
Sea Water and Lake Water Salts	45
<i>Condition of Tulare Water in 1888</i>	45
Analysis of the Water	46
Rate of concentration and survival of fish	46
<i>Condition of Tulare Lake in Winter 1888-89</i>	46
"Fish Dying by Shoals"	46

	PAGE.
Expedition of Mr. J. G. Woodbury	46
Description of Cross Creek fisheries.....	46
Voracity of Lake Perch.....	46
Retirement of Catfish to the Sloughs.....	47
Circumnavigation of the Lake—its depth and channel	47
Character of the Water	47
Abundance of Mussel Shells	47
Character of the lake-shore lands	47
The future of the Lake	47
Previous epoch of low water.....	47
Results of Draining the Lake.....	47
Present composition of Tulare Lake water.....	48
Table of Composition	48
<i>Composition of the Water at different Periods</i>	48
Comparative Table.....	48
Great progress of concentration during 1888.....	49
Possible inflow of Alkali	49
Alternatives in regulating the Lake.....	49
<i>Examination of Lake-border Soils</i>	49
Mechanical and Chemical Analyses.....	49-50
Need of Fallow and Neutralization of Alkali.....	50
Different condition of soils at different points.....	51
INVESTIGATIONS ON THE PROXIMATE COMPOSITION OF THE SALINE CONTENTS OF WATERS AND OF NATURAL ALKALI	51
“ <i>On the Mutual Reactions of Carbonates, Sulphates and Chlorides of the Alkaline Earths and Alkalies</i> ”.....	51
Early observations on the subject.....	52
Neglect of these observations, and practical importance of the same.....	52
Verification of previous experiments, and new forms of same.....	53-54
Paradoxical lecture experiment	54
Quantitative experiments, showing limits of complete reaction	54-55
Behavior of Alkali Chlorides.....	55
Wide importance of these reactions.....	56
Table showing their effect in Kern and Tulare Lakes	56
Great possible variations of conditions	57

INTRODUCTORY NOTE.

In view of the continued great pressure of personal work upon the Director, and the resulting delay or forced omission of the timely publication of the annual reports and even of bulletins, it is deemed advisable to change the policy pursued heretofore, at least for the time being, and to publish separately the parts of the report as fast as they can be prepared for publication.

Thus far, two series of publications have been issued by this department (embracing the instructional as well as the experimental work), to wit: Annual or biennial *reports*, in which *all* the matter accumulated since the closing of the previous report was systematically set forth and fully discussed; and *bulletins*, in which special subjects of immediate interest were treated in a rather brief and popular manner, and which were originally designed chiefly for publication in the newspapers of the State, but also circulated extensively by direct mailing to applicants or others known to be interested. These bulletins were not put in paged form, not being intended for permanent preservation, since their contents were to be reproduced in a more complete and final form in the next succeeding report.

Some of the earlier stations have pursued the same policy, until the enactment of the Hatch bill freed them from the payment of postage, and they were thus enabled to circulate their publications at a merely nominal cost, thus reaching directly the persons interested. The newly established stations appear to have almost unanimously adopted the policy of publishing *in full* every series of experiments as soon as concluded, in the (presumed) final form of octavo pamphlets; and having once gone to the expense of printing these, it is presumable that they will not reproduce them in the form of annual reports.

While in some respects this mode of publication has its advantages and is most convenient for the stations, the omission of the brief summaries followed by the practical conclusions to be drawn from the work, and which readily found a place even in the daily papers, but very generally in the weeklies, cuts off a kind of communication with the bulk of the population that cannot readily be replaced by the direct circulation of the paged and more elaborate and lengthy reports now mostly issued under the name of bulletins. They could not find a place in the newspapers unless previously "boiled down," a process which in the case of technical papers is not often accurately or properly performed in a newspaper office, and the paged form adds to the repugnance of the printer toward its reproduction.

It may then be fairly questioned whether the abandonment of the brief summaries suited to publication in the general newspapers, and the substitution therefor of the full record, often ill adapted to the comprehension of unprofessional readers, is an improvement so far as the popular understanding and availability of the work of the station is concerned. Moreover, the more ambitious form of a pamphlet discourages the publication of much timely matter which in transient form it should not be deemed beneath the dignity of the stations to impart to the public.

In pursuance of this view, this station is not yet prepared to abandon the first plan of transient bulletins; distinct in their nature and object from the

final report, which is to be made up annually at least, in the permanent form of octavo pamphlets, and to contain a full record and connected discussion of the matter of the bulletins previously published, as well as all other matter of interest that may have remained unpublished on account of unsuitableness for the general public. It is thought that thus, without incurring unnecessary delay in the publication of practically important matter, a well matured and fruitful discussion of experiments and results can best be assured.

EXAMINATION OF WATERS.

The investigations of waters and of questions relating to water supply, that form the subject of the present publication, while serving to illustrate and elucidate the importance and variety of the various phases of the subject in this State, might with some create an impression that, as so many questions are asked and such frequent doubts of the quality of the waters are expressed, a lack of really drinkable waters may be characteristic of the State at large. This, however, would be an entirely erroneous inference. It is true that the "arid" climate of California tends to the retention in the soils of a great deal of the soluble salts that in the Mississippi Valley are currently washed into the country drainage by the abundant rainfall; and hence "mineral" waters are very abundant. On the whole, there is very little difficulty in securing supplies of good, potable water outside of the "desert" regions; but the doubtful samples find their way to the station laboratory and are thus gazetted, while the abundant supplies of pure water remain unheralded.

The following circular was issued in order to define the scope of the Station's work, and to insure a full understanding on the part of persons desiring such investigations, of the conditions necessary to secure correct results:

CIRCULAR CONCERNING ANALYSES OF WATERS.

AGRICULTURAL EXPERIMENT STATION, }
BERKELEY, CAL., March 30, 1889. }

The frequency with which analyses of water of various kinds are called for, renders it desirable to formulate special directions for the taking of proper samples, and also to state what the Station can and can not undertake to do in the direction of water investigation. Our working force being limited, it becomes necessary to discriminate somewhat closely between cases of merely individual interest, and those which may be considered as more or less affecting a wider circle, or the public at large.

Of the latter class of cases, those involving irrigation water and the water supply of towns or cities, are of such wide importance that the Station will undertake to carry the analyses to the limit required by the objects in view.

The waters of artesian wells, forming outlets of extended artesian reservoirs, which may be still further tapped and used for irrigation or household purposes, manifestly fall within the same category.

Of the above classes of water, therefore, both "qualitative" and "quantitative" analyses, sufficiently detailed for all practical purposes, will be made upon request, as rapidly as they can be reached upon the regular docket.

The waters of private wells and small springs, interesting only the owners, will, as a rule, be analyzed "qualitatively" only, so far as to determine their healthfulness or adaptation for domestic use; except that in all cases the total quantity of solid ingredients, and the proportion of earthy and saline (permanently soluble) matters will be determined. These determinations will, as a rule, be amply sufficient to decide whether or not such waters are suitable for the uses contemplated, and, if faulty, to determine the means, if any, for improving their quality. Waters suspected of sewage contamination will also be investigated with respect to their contents of improper ingredients of animal origin.

The analysis of supposed medicinal waters will, as a rule, be carried only so far as to determine if they are likely to prove of value, so that the sender may decide whether or not it may be worth while to go farther and incur the expense of a detailed quantitative analysis for commercial purposes. The Station does not undertake the latter class of work under any ordinary circumstances.

When for special reasons persons interested desire to have work, not included in the above categories, done under the supervision of the Director, it may usually be done by competent volunteers temporarily employed for the purpose, when such persons are available; the charges to be agreed upon between them and the applicant.

Mode of Taking Samples.—Since the value of any analysis is essentially dependent upon the correct sampling of the material, the following directions should be carefully observed when waters are sent for examination:

1. Not less than two wine bottles of the water should be sent in *any* case. An ample supply of material not only greatly facilitates the chemist's work, but also enables him to control at once, by repetition, any unexpected or questionable result he may have obtained.

2. Of irrigation or any other waters intended for *quantitative* analysis, *at least two gallons* should be sent in every case. Such samples should be put up in new, or very carefully cleansed, demijohns, not in earthenware jugs, and least of all in tin or other metallic cans. In both of the latter class of vessels the water is almost sure to be so contaminated before arrival, as to render the samples useless. Demijohns, and bottles as well, should be rinsed with sand or fine gravel (not with bird-shot) until it is absolutely certain that nothing adheres to the inside, and until all odor of previous contents (vinegar, wine, molasses, whisky, etc.) has been removed. The corks used for closing should also be new, or, if used before, should be boiled with water until fully cleansed of all odors or adherent deposits.

3. The water should in all cases be taken directly from the well or spring when bottled. If gas escapes with the water, a sample of the gas should be collected in a bottle first filled with the water and then inverted in the spring basin so as to allow the gas to bubble into and fill the bottle; which should then be immediately corked *underwater*, the cork promptly dried and then (after cutting down to the level of the bottle neck) carefully covered with sealing-wax, or beeswax, if the former be not available.

4. All samples should be accompanied by full statements of the location of the source of the water, of the depth of well, amount of water or flow of spring or stream; as far as possible, of the nature of the rock or other material from which the water comes, and of all other facts bearing upon its nature and possible origin. In case of warm springs the temperature should also be given.

All such packages should be forwarded by express, charges prepaid, to University of California, Berkeley, care of

E. W. HILGARD,
Director of Experiment Station.

For the information of chemists, it may be appropriate to state that the restriction of the examination of waters to such points as will suffice to determine their practical uses, is rendered necessary by the large volume of work called for, and for the performance of which but a small force is available. It is only in cases of special importance that the observance of the elaborate precautions and processes of Bunsen can come within the limits of the Station work.

THE SOFTENING OF HARD WATERS FOR DOMESTIC USE.

Since waters possessing an inconvenient degree of hardness are very common in this State, owing to the almost universal prevalence of calcareous soils and geological deposits, it is of no little interest to have some simple means of doing away with this property, so as to render such waters more convenient for domestic uses. This is the more important, as in some cases the presence of a large proportion of magnesia tends to cause serious, even though usually only temporary, gastric disturbance with persons unused to such waters, whereby quite frequently an unfounded prejudice against the general health-conditions of perfectly healthful localities is created. This subject has been heretofore discussed in Bulletin No. 20 of the College of Agriculture, as well as in the report for 1884, pages 59 and 60. Its continued importance and the frequent demand for information in the premises justifies a more elaborate consideration in this place.

When, as is most commonly the case, this hardness is due to the presence of large proportions of the *carbonates* of lime and magnesia, it can be recognized by the extent to which the water becomes turbid, or forms whitish scum or incrustations, when boiled.

Boiling, then, is one of the means for softening waters that are hard and "curdle the soap" from this cause; and this fact is well known to housekeepers, but owing to the inconvenience of the application of this remedy, it is rarely resorted to except for drinking water. For *this* purpose, boiling has the special and additional advantage of insuring the destruction of any minute germs of disease that might contaminate the water.

To soften water for washing, a common and very good remedy is the use of *carbonate of soda* ("sal soda") in sufficient quantity to bring down the lime and magnesia, and thus insure the proper solution of the soap to form suds. Only there is too often a mistake made in not allowing time for the soda to bring down the lime and magnesia in a powdery form, which requires from half an hour to an hour when the water is cold, but occurs very quickly when the water is hot. When, as is commonly done, the soap is put into the water while the lime is still in the gelatinous form and diffused in the water, a certain amount of "curdling" will still happen, and the washed clothes (especially flannels) will have that soggy and unpleasant touch which is caused by the accumulation of the lime- and magnesia-soaps in them.

That it is undesirable to use soda for softening water to be used for drinking hardly needs more than mention. The natural hard waters usually contain quite as much of saline matters as is desirable in drinking water.

Soda, however, does not in any manner correct the sanitary condition of a water; on the contrary, it aids in keeping vegetable and animal matters in solution, and unless added in very large excess does not interfere with the vitality of fungous or other germs.

By far the most convenient and effective mode of purifying larger quantities of hard water for domestic use, is the introduction of a definite amount of *quicklime*, proportioned to the requirements of each particular

water; a point that can be readily ascertained by any one having an ordinary capacity for observation.

The principle upon which this apparently paradoxical process is based is this: The lime and magnesia in most hard waters are contained in the form of carbonates, dissolved in the water by the aid of free carbonic acid. Whatever drives off or takes possession of this free acid will bring down the earthy substances in an insoluble form, and thereon depends the efficacy of boiling as well as of the addition of "washing soda" ("cooking soda" or bi-carbonate will *not* produce the effect). Now, lime in the *caustic* condition (as lime water, or "milk-of-lime," freshly prepared) will most effectually take possession of any free carbonic acid, and will form with it the same insoluble compound that, when hard water is boiled, settles to the bottom or incrusts the boiler. Hence, when an amount of clear lime water, just sufficient to absorb all the carbonic acid in a water, is added to it, both the lime added, and the lime and magnesia originally contained, are brought down in the insoluble form, and the mineral contents of the water are diminished very materially, sometimes to less than one half of the original amount. With the sediments thus brought down there also usually comes a large proportion of the vegetable or animal matters contained in the water; so that instead of perhaps becoming putrid in a tank serving for domestic supply, water so treated will remain clear and odorless for a long time, if protected from re-contamination by insects, falling leaves, dust, etc.

The only practical difficulty in carrying out this purification is the ascertainment of the proper proportion of lime or lime water to be used, so that the water shall neither retain too much of its original hardness nor acquire an unpleasant taste and astringent action from an excess of lime.

This can, however, be done quite readily by a few tests with different proportions of lime water, and the very simple trial as to which will produce the least "curdling" of soap when ready-made soapsuds are added in small proportion. Whatever proportion of lime water or lime satisfies this easily ascertained condition, is the best for all purposes.

I have found by numerous experiments that for the waters of the wells, springs, and smaller streams, as well as the catchment reservoirs of the middle coast ranges and their valleys, the best effect is usually produced by the addition of from one tenth to one twentieth of clear lime water.

As one part by weight of pure, unslaked lime requires seven hundred parts of water for its solution, a simple calculation shows that the above proportion corresponds to from five to eight grains of lime per gallon, or about three quarters to one pound per thousand gallons.

In the practical working of this process, it is best to have, for small tanks up to one or two hundred gallons, a supply barrel in which *clear* lime water of full strength can always be kept on hand ready for use. A few pounds of lime, slaked into a creamy mass, may be put in the barrel, the sediment being stirred up from time to time as the clear water standing over it is replaced. Of course, in order to preserve the proper proportion, once determined, only *clear* water must be used, otherwise more lime than is called for, will be introduced into the water. The lime-water barrel should be kept closely covered.

For larger tanks it will be more convenient either to take a weighed amount of unslacked lime for each one thousand gallons, slack it into "milk-of-lime" and stir it in, or else to prepare a large quantity of "milk-of-lime" which, when thoroughly stirred, will for each measure (bucketful) contain a known amount of lime. This would be the best way to handle cases like one reported in the present report (see p. 16), in which the feed-

ing water of boilers requires to be corrected. It should, in this connection, be understood that the lime-treatment is very efficacious against the frothing produced in boilers by waters containing a large amount of vegetable matter, as is commonly the case in that from ponds or other catchment reservoirs.

The sediment that accumulates in tanks used for this treatment is usually of a sandy nature, and not readily stirred up; it therefore causes little inconvenience, and can be removed at leisure, from time to time, as it becomes too large.

It is true that, like some other household measures conducive to sanitation and comfort, the maintenance of this system requires some regular personal interest and attendance on the part of some member of the family. If carelessly handled, there may be unaccountable variations in the gastric conditions of the family, from one extreme to the other, and the soap may curdle from the water's natural hardness one week, and from excess of lime the next. But there is no excuse for such occurrences, except as the result of carelessness or negligence, and the advantage gained, whether as to health or comfort, amply repays the trouble when these hard waters require to be used.

ANALYSES OF WATERS.

A. Common Well Waters.

Well water, sent by Mr. L. Zierngibl, St. Helena. "The well is on a hill near St. Helena; dug in August, 1887, to a depth of sixty-two feet. At a depth of thirty-seven feet water came in slowly from the sides, and to secure a good quantity of water the well was dug twenty-five feet further. Until about two weeks ago the water was crystal clear; since then it looks bluish, and when boiled deposits a brown sediment."

The analysis gave:

	Grains per Gallon.	Parts in 10,000.
Total residue upon evaporation.....	13.27	2.272
Again soluble after evaporation.....	1.57	.262
Insoluble after evaporation.....	9.07	1.552
Organic matter and combined water.....	2.63	.452
Silica	7.00	1.200

The soluble part consists in the main of chloride of sodium, or common salt, with some carbonate of soda and small amounts of lime and potash.

The insoluble part consists mainly of silica, with small amounts of the carbonate and sulphate of lime, and a little magnesia.

The residue from evaporation blackens considerably when heated, from the presence of vegetable matter, and the water on boiling forms a deposit, consisting mainly of silica.

This water is quite peculiar in that its chief mineral ingredient is silica, while the usually predominant ingredients—compounds of sodium, calcium, and magnesium—are present in very small amounts only. It is, of course, quite unobjectionable for domestic and other uses.

Well water, from a well on one of the Mission Hills; sent by Mr. B. Strozynski, San Francisco. The well is three hundred feet above sea-level,

was formerly seventy-seven feet deep and has since been sunk to the depth of eighty-five feet, when a spring was struck which gives forth water such as the sample analyzed. The water from the original well was very hard and not good for family use. The result of the analysis is as follows:

	Grains per Gallon.	Parts in 10,000.
Total residue by evaporation	216.88	37.132
Again soluble after evaporation (common salt with a little chloride of magnesium and carbonate of sodium)	142.82	24.452
Insoluble after evaporation (gypsum)	51.07	8.744
Insoluble after evaporation (carbonate of calcium with some carbonate of magnesium)	21.61	3.700
Insoluble in acid (silica)	1.38	.236

The amount of organic matter present is very slight. Both the water itself and the soluble portion shows considerable alkalinity to test paper, indicating the presence of soda carbonate.

It will be seen that the greater part of the mineral contents of this water consists of common salt, to such extent as to render it unfit for domestic uses. In its general character the mineral residue resembles greatly that from the evaporation of sea water, and for medicinal uses its properties would be very nearly the same.

Tank water (No. 1); sent by Dr. M. C. O'Toole, North Berkeley. The water was clear, but had a flat taste and a weakly alkaline reaction. It was suspected of having caused illness.

	Parts in 10,000.	Grains per Gallon.
Solid residue on evaporation	4.928	28.8
Soluble in water after evaporation	1.512	8.8
Insoluble after evaporation	1.996	11.7
Organic matter and water	1.420	8.3

Upon ignition the residue blackened strongly. The soluble part had a faintly alkaline reaction, and contained chiefly common salt with some Glauber's salt; while the insoluble part consisted of gypsum and carbonates of lime and magnesia, with a small proportion of silica. A strong reaction was obtained in a test for free ammonia, and similarly for combined ammonia. The water had evidently received sewage contamination in some way, and was unfit for domestic use.

Running creek water (No. 2); sent by Dr. M. C. O'Toole, North Berkeley. The sample received was turbid from clay. After filtration the analysis gave:

	Parts in 10,000.	Grains per Gallon.
Total residue on evaporation	3.75	21.8
Organic matter and loss	1.20	7.0

Upon ignition the residue became intensely black. The test for chlorine showed only a moderate amount present; similarly the reaction with lime

water produced only a moderate pulverulent precipitate. There was very little carbonate in the residue. A water of doubtful quality for domestic purposes.

Well water (No. 3); sent by the same. The water was tasteless, odorless, and clear.

	Grains per Gallon.	Parts in 10,000.
Total residue by evaporation	52.4	8.97
Again soluble after evaporation	21.5	3.60
Insoluble after evaporation	16.2	2.77
Organic matter and chemically combined water	15.2	2.60
Silica	1.2	.21

The residue became intensely black upon ignition. The soluble part consisted mainly of common salt with small amounts of potash and magnesia salts. The part insoluble in water consisted of carbonates of lime and magnesia with gypsum, and traces of alumina and iron.

The excessive amount of saline and organic matter in this water, as well as the predominance of common salt, indicate outside contamination which renders it unfit for domestic use.

Well and spring waters, from the neighborhood of Saratoga, Santa Clara County; sent by Mr. G. E. Pinder. Of three samples sent, No. 1 is from a well thirty feet deep, in which a light will not burn; No. 2 is from a spring in the creek; No. 3, from a galvanized iron pipe, running as a siphon six hundred feet to a well thirty feet deep.

	1.	2.	3.
Total solid residue by evaporation (grains per gallon).....	21.89	23.36	21.32
Again soluble, after evaporation (grains per gallon).....	2.83	4.41	5.83
Insoluble, after evaporation (grains per gallon).....	13.06	12.89	9.81
Organic matter and combined water (grains per gallon)	6.00	6.05	5.66

All these waters are alike in qualitative composition. The soluble part consists largely of carbonate of soda, with smaller amounts of the sulphate and chloride of sodium and some potassium.

The insoluble part, which in all greatly exceeds the soluble, consists chiefly of carbonate of lime, with a little gypsum, carbonate of magnesia, and considerable silica.

These are simply hard waters, like most of those of the Santa Cruz Mountains; they can readily be softened by boiling or by the addition of about one tenth of clear lime water, or (for washing) by the use of a little sal soda or borax. No. 3 blackens considerably on ignition, from the presence of vegetable matter, and should be purified by means of lime water for domestic use. (See, on this subject, the directions given under the preceding head.)

Well water, from a well near Saratoga; sent by Mr. George E. Hyde, Saratoga, Santa Clara County. The water is slightly alkaline, and clear.

	Grains per Gallon.	Parts in 10,000.
Total residue by evaporation	14.50	2.484
Again soluble after evaporation	4.88	.836
Insoluble after evaporation	6.63	1.136
Organic matter and combined water	2.99	.512
Silica	2.40	.412

The soluble part consists chiefly of sodium chloride, or common salt, with a very little sulphate, and a small proportion of potash salts.

The insoluble part contains the carbonates of lime and magnesia, in about equal proportions, and fully one third of the whole is silica. Only a very small amount of organic matter is present.

This is a well water of excellent composition, softer than most others of the region, and suitable for every domestic use.

Well and spring waters, from the property of the Paul O. Burns Wine Company, San José. These waters were sent for examination on account of vexatious difficulties encountered in their use for steam and other purposes.

Sample No. 1 was taken from the supply tank (filled with well water), which had been lately cleaned but not whitewashed; it is a new tank and before had not been cleaned for four months; the water had acquired a very offensive odor. The water sample sent gave off a strong odor of sulphuretted hydrogen; it was quite alkaline to test paper. The water becomes turbid on opening the bottle and gradually loses its odor.

	Parts in 10,000.	Grains per Gallons.
Total residue by evaporation	3.845	22.46
Again soluble in water after evaporation	.825	4.82
Insoluble in water after evaporation	1.825	10.66
Combined water and organic matter	1.195	6.98

The residue blackened strongly on ignition and burned white with some difficulty. The water-soluble part had an alkaline reaction, and contained common salt, Glauber's salt, and some carbonate of soda and sulphate of potassium. The part insoluble in water was composed of the carbonates of calcium and magnesium with a small amount of gypsum and very little silica. The test for ammonia gave a decided indication of its presence.

This water is not materially different from the usual run of natural waters in the Santa Clara Valley and Santa Cruz range, except in the very large amount of organic matter, and especially the presence of ammonia, which indicate contamination of some kind.

Boiler water (No. 2); sent by the above. "Water as it comes from steam boiler, at blowing off, cleaned internally, and still it throws this heavy sediment, causing the water to foam and become muddy, stuffing the gauge glass and making much trouble." The water gives a decided alkaline reaction to test paper.

	Parts in 10,000.	Grains per Gallon.
Total solid contents by evaporation	8.690	50.75
Again soluble after evaporation	7.095	41.44
Insoluble after evaporation	.480	2.80
Organic matter and water	1.115	6.51

The residue blackens very strongly upon ignition and burns white with great difficulty. The soluble part contained in the main chloride of sodium with smaller amounts of sulphate of potassium, and gypsum; it was quite strongly alkaline. The insoluble part was formed of carbonate of magnesium and a little gypsum and silica. The test for ammonia gave a strong reaction.

It appears from the above data that in using it for making steam the tank water had been boiled down to somewhat over one third of its bulk, and the bulk of the earthy matters had come down in the insoluble form of "slush"; while the organic matter remained dissolved in the alkaline water, causing it to froth.

Spring water (No. 3); sent by the same, with the view of possibly substituting it for the well water heretofore used. The water was clear and colorless; emitted a faint odor of sulphuretted hydrogen; its reaction was quite alkaline.

	Parts in 10,000.	Grains per Gallon.
Total solid contents by evaporation	7.515	43.89
Soluble in water after evaporation	2.625	15.33
Insoluble in water after evaporation	3.505	20.47
Organic matter and water	1.385	8.09

The residue becomes quite black on ignition, and burns with difficulty. The soluble part is quite alkaline, and contains chloride of sodium, Glauber's salt, and traces of sulphates of potassium and magnesium. The insoluble part is composed of gypsum, carbonates of magnesia and lime, and silica. The reaction for ammonia is extremely faint.

It appears from the above analysis that this spring water would doubtless make matters worse if used in the steam boiler. It would yield just double the amount of "slush," and its saline contents being three times greater, while the organic matters are still somewhat excessive, the frothing would probably be quite as inconvenient.

The cause of the trouble with the boiler is amply apparent from the statement of No. 2, the tank water, as compared with the boiler water, which is understood to be originally the same. It appears that for every gallon of evaporated, over ten and one half grains of sediment are deposited in the boiler.

That sediment consists in the main of carbonates of lime and magnesia, while the soluble part is mainly common salt and Glauber's salt, or sulphate and chloride of sodium, with some carbonate of soda. At the same time the water contains a remarkably large amount of organic impurities, creating the presumption of sewage contamination, which is further strengthened by the fact that both Nos. 1 and 2 contain ammonia in no inconsiderable proportion. The organic matters with the sulphates present, passing into putrid fermentation, create the putrescent odor.

The difficulty with the boiler might doubtless be remedied, and the water rendered sufficiently pure for most uses, by purification with lime water according to the process described above; *i. e.*, by the addition of about $\frac{3}{4}$ pound of unslaked lime, first slaked into a thin slush, stirred into the tank for every one thousand gallons of water. This will throw down nearly all the earthy matters, and most of the organic, and render the water applicable to nearly all ordinary domestic purposes.

Well water; sent by Thomas E. Hughes, of Fresno. The water was clear, odorless, tasteless, with a slightly alkaline reaction.

	Parts in 10,000.	Grains per Gallon.
Total residue by evaporation	2.000	11.6
Again soluble after evaporation	.620	3.6
Insoluble in water after evaporation	1.113	6.5
Water and organic matter	.260	1.5
Silica	.489	2.8

Upon ignition the residue darkens slightly. The soluble part is strongly alkaline, and consists of Glauber's salts, with small amounts of common salt, carbonate of soda, and gypsum. The insoluble part is composed of carbonate of lime, silica, and a small amount of carbonate of magnesia.

This is a very good water for all domestic uses as well as for irrigation, having rather an unusually low amount of mineral contents of unobjectionable character.

Well water, from near (one mile from) Polonio Pass, T. 26, R. 17 E., Sec. 15; on road from Bakersfield to San Luis Obispo, in the northwest corner of Kern County; sent by John R. Carr. This well is fifty-six feet deep, and yields fifty to sixty gallons of water daily. In boring it there were found: first, fifteen feet of soil and subsoil; then a gray slate, which crumbles on exposure to air. The water comes from the (clay) slate, smells strongly of sulphuretted hydrogen, and is strongly alkaline to test paper. The analysis gave:

	Grains per Gallon.	Parts in 10,000.
Residue upon evaporation	147.08	25.180
Again soluble after evaporation	118.22	20.240
Insoluble after evaporation	19.62	3.360
Organic matter and combined water	9.23	1.580

The soluble part is strongly alkaline to test paper, and consists largely of carbonate of soda, with sulphate (Glauber's salt), and chloride of sodium (common salt), and small amounts of potash, lime, and magnesia.

The insoluble part consists mainly of the carbonate and sulphate of lime (gypsum), with some carbonate of magnesia and silica.

This water is far too strong in mineral ingredients for any domestic use; as a mineral water it would be a saline purgative of moderate strength.

Water from a dug well, near Alpine Station, Los Angeles County; sent by H. Slotterbeck, of Los Angeles. The wells from which this water was obtained are on Sections 34 and 35, T. 6 N., R. 12 W., about two miles from the above station and immediately adjoining the foothills of the

northern slope of the mountains bordering the Mojave desert. From the description given the formation of the region is somewhat complex, consisting of both granite with more or less quartz, and sandstone with subordinate beds of calcareous and gypseous clay and marl. In the wells a sandstone ledge was encountered at from forty to fifty-eight feet, and beneath the same a small quantity of water seeped in, of which the above is a sample. It is also stated that on an adjoining section, higher up, a plentiful supply of good water was obtained at fifty feet, while elsewhere in the region no water is found at a less depth than two hundred feet.

The water was quite clear, faintly alkaline to test paper, had a saline, flattish taste.

	Grains per Gallon.	Parts in 10,000.
Total residue by evaporation	406.07	69.520
Again soluble after evaporation	269.80	46.200
Insoluble after evaporation	98.60	16.880
Organic matter and combined water	37.60	6.440

The soluble part consists mainly of Glauber's and common salt, or sulphate and chloride of sodium, considerable Epsom salt (sulphate of magnesia) and small amounts of gypsum and sulphate of potassium.

The insoluble part consists chiefly of gypsum with some carbonate of magnesia.

This is a strong saline purgative water, fit only for careful medicinal use.

Well water, from Fulton Wells, near Los Angeles City; sent by W. F. Nimmo. Water clear, with strong odor and taste of sulphuretted hydrogen. The analysis gave:

	Parts in 10,000.	Grains per Gallon.
Total residue by evaporation	4.800	28.0
Soluble in water after evaporation	3.158	18.5
Insoluble in water after evaporation	.952	5.5
Organic matter and water	.690	4.0
Silica	.022	.1

The residue became intensely black upon ignition. The soluble part consisted chiefly of chloride of sodium (common salt), with very small amounts of chloride of potassium and gypsum. The insoluble part consisted of the carbonates of calcium and magnesium, with a trace of silica.

A sulphur water of good strength and slightly saline character. From some cause the sample contained a very large proportion of vegetable matter, causing the blackening of the residue when heated and modifying the taste as well. Whether this matter was accidental or is derived from the rock through which the water passes, could not be determined.

Water from a driven well at Riverside; sent by Henry Jarecki. The water was clear, odorless, tasteless, and had a faintly alkaline reaction.

	Parts in 10,000.	Grains per Gallon.
Solid contents upon evaporation.....	5.975	34.90
Again soluble after evaporation.....	2.583	15.04
Insoluble after evaporation.....	2.171	12.68
Silica.....	.402	2.33
Combined water and organic matter.....	1.220	7.13

The residue did not blacken on ignition, showing that very little organic matter was present.

The soluble part contained in the main common salt with very small amounts of gypsum and chloride of potassium; while the insoluble portion consisted chiefly of carbonate of lime, with smaller amounts of gypsum, carbonate of magnesia, and silica. The soluble portion had a faintly alkaline reaction, doubtless due to the presence of a trace of carbonate of soda.

Notwithstanding its relatively large proportion of mineral salts (which render the raw water very hard), it is unobjectionable for domestic use on account of their innocuous character. Nearly half of the entire amount is carbonate of lime, which may be thrown down by boiling or in other ways mentioned above, leaving the water with but fifteen grains per gallon, of common salt.

Well water, from San Bernardino; sent by Mrs. C. M. Davis, San Bernardino. Water clear, no special taste.

	Parts in 10,000.	Grains per Gallon.
Total solid residue upon evaporation.....	2.330	13.6
Soluble after evaporation.....	.600	3.5
Insoluble after evaporation.....	1.200	7.0
Chemically combined water and little organic matter.....	.530	3.1

The soluble part consists of chlorides of the alkalies with very small amounts of sulphates.

The insoluble part consists mainly of gypsum, very little carbonate of lime and magnesia being present.

This water is fully available for all domestic uses, the mineral matter present being quite moderate in amount. It can be softened by the use of a little sal soda, or lime water.

Well waters, from two wells on Alturas Rancho, near San Luis Rey, San Diego County; sent by Cave J. Coutts, Esq., who makes the following statement in regard to it: "Of the two wells, one is over four hundred feet above the sea level, fifty feet deep; the other, three hundred and fifty feet above sea level, ninety-eight feet deep. The water in the upper well, which is on a sidehill in adobe formation, is so thoroughly impregnated with mineral of some kind that I have feared using it for stock or irrigation. The lower well is six hundred feet from the upper one; after the first six feet, it is all through decomposed granite. Its water also has some mineral, and I use it for stock, but have not dared to use it for irrigation until I could find out if its properties were not injurious to trees or vines. Nearly all the water in this neighborhood has the same taste as that of the lower well."

The water from the upper well is clear, and has a distinct saline taste.

That of the lower well is also clear; on opening the bottle, a strong odor of sulphuretted hydrogen was noted, but not enough to be quantitatively determined.

The analyses resulted as follows:

	UPPER WELL.		LOWER WELL.	
	Grains per Gallon.	Parts in 10,000.	Grains per Gallon.	Parts in 10,000.
Total solid residue by evaporation.....	500.00	85.60	84.11	14.40
Soluble part after evaporation.....	368.86	63.15	52.69	9.02
Insoluble part after evaporation.....	19.57	3.35	8.64	1.48
Chemically combined water and organic matter	111.57	19.10	22.78	3.90

In the water of the upper well, the soluble part consists in the main of common salt, with considerable quantities of chlorides of calcium and magnesium, and a small amount of gypsum. The insoluble part consists chiefly of silica with a little gypsum.

In the water of the lower well, the ingredients were nearly the same as above, with the addition of some carbonates both of the alkalies, and of lime and magnesia.

As to the water of the upper well, it is too strongly mineral, and medicinally too energetic a purgative to be used for any domestic or agricultural purpose whatsoever. Its ingredients are doubtless derived from the rock from which the adobe soil was formed. The water of the lower well is in substance the same, but less strongly tainted with salts, in consequence of an accession from the purer granite drainage, which has imparted to it some of its ingredients. The water is still, however, (quite five times) too strongly mineral for continued domestic use, and few plants would long resist its use in irrigation.

It is to be hoped that good water may be found deeper within the granite, from which, as a rule, the purest waters flow.

SPRING WATERS.

Spring water, from a farm near Paradise, Butte County; sent by Mr. Irving A. Coonradt, Paradise, Butte County. The water is very faintly alkaline, and contains:

	Gains per Gallon.	Parts in 10,000.
Total residue by evaporation	5.35	.916
Again soluble after evaporation.....	.85	.144
Insoluble after evaporation.....	3.41	.584
Organic matter and combined water.....	1.09	.188

The soluble part consists mainly of Glauber's salt or sulphate of soda, with small amounts of common salt and of magnesium chloride or bittern.

The insoluble part consists in the main of carbonate of lime, with a little magnesia and silica, and a not inconsiderable amount of iron oxide.

When fresh the water is clear, but on exposure to air becomes turbid and deposits .64 grains per gallon of ferric hydrate or iron rust, from which its peculiar taste is derived.

Apart from this, the water is remarkably free from mineral ingredients, and resembles a river water more than that of a spring. It can therefore hardly count as a mineral water. It may be termed a very weak chalybeate.

Spring water, from the "Far Niente" farm; sent by Mr. John Benson, Oakville, Napa County. The water is quite alkaline and contains:

	Grains per Gallon.	Parts in 10,000.
Total residue after evaporation.....	23.22	3.976
Again soluble after evaporation.....	12.59	2.156
Insoluble after evaporation.....	9.02	1.544
Organic matter and combined water.....	1.61	.276

The soluble part is strongly alkaline to test paper and contains, besides carbonate of soda, chiefly the sulphate (Glauber's salt) and some chloride or common salt.

The insoluble part (forming less than three sevenths of the total mineral matter) consists mainly of carbonate of lime, with a small amount of magnesia.

The residue blackens when heated, showing the presence of some organic matter; but no ammonia was detected, showing the water to be free from sewage contamination, despite a rather large proportion of common salt. This water, though very hard, is fully available for domestic use, and may be softened as described above.

Spring water, from the Blue Mountains near Vacaville; sent by Mr. J. R. Collins, Vacaville. The water was clear but had a strong taste and odor of sulphuretted hydrogen; became turbid on standing; slight alkaline reaction. Lime water produced a slight turbidity.

The water contained:

	Parts in 10,000.	Grains per Gallon.
Total residue upon evaporation.....	3.600	21.02
Soluble in water after evaporation.....	.780	4.56
Insoluble in water after evaporation.....	2.132	12.45
Combined water.....	.688	4.01

The soluble part was quite alkaline, and contained carbonate and sulphate of sodium, with a smaller amount of common salt, sulphate of potassium, and gypsum. The insoluble part was composed mainly of carbonate of calcium, with small amounts of carbonate of magnesium and silica.

This water is too weak to be considered a mineral one, its contents scarcely exceeding those of ordinary drinking waters in the State. Its sulphurous odor, from a small proportion of sulphuretted hydrogen, alone imparts to it a somewhat unusual character. It is very hard.

Spring water, from Oakland Ranch, Applegate, Placer County; sent by Rev. A. T. Perkins, of Alameda. The water as received contained considerable brownish flocculent matter, which was removed before evaporation. The filtered water was clear and colorless, but had a faint styptic taste.

The analysis gave:

	Grains per Gallon.	Parts in 10,000.
Total solid residue by evaporation	12.6	2.160
Soluble part after evaporation	2.8	.490
Insoluble part after evaporation	7.5	1.280
Chemically combined water and small amount organic matter ..	2.3	.390

The soluble part consists of chiefly chlorides and bicarbonates of the alkalies, with a trace of sulphates.

The insoluble part consists of chiefly carbonate of lime, with a small amount of carbonates of magnesia and iron. The amount of carbonate of iron is in the insoluble part about 1.5 grains per gallon; the suspended matter, consisting chiefly of ferric hydrate, amounts to about 6.5 grains per gallon. The total amount of carbonate of iron would, therefore, in the fresh water, amount to about eight grains per gallon, making the original total of solid contents about nineteen grains. The water thus appears as a chalybeate of fair strength, but without other active ingredients of any importance.

Spring water, from a spring twelve miles south of Livermore, in the mountains, about one thousand eight hundred feet above sea level; sent by W. M. Mendenhall, Livermore. The water was clear, tasteless, and odorless, with a slightly alkaline reaction.

	Parts in 10,000.	Grains per Gallon.
Total residue by evaporation	5.610	32.76
Again soluble after evaporation	1.980	11.57
Insoluble after evaporation	2.615	15.27
Combined water and organic matter	1.015	5.92

The soluble part is quite alkaline, and is composed of chloride of sodium, Glauber's salt, some carbonate of sodium, and sulphate of potassium.

The insoluble part consists of the carbonates of calcium and magnesium and gypsum.

The mineral contents of this water are rather high for daily use, but most persons could probably become accustomed to its use. In medicinal character it is slightly purgative.

Spring water from a tunnel, twenty to thirty feet deep, near Los Gatos, Santa Clara County; sent by F. H. McCullagh. Only a very small supply of this water was obtained, and hence it was abandoned as a source of supply for domestic use, but from the strong sulphurous odor in the tunnel it was thought the waters might possess medicinal value. It is clear, slightly alkaline to test paper, but when received had no sulphurous odor.

	Grains per Gallon.	Parts in 10,000.
Total residue by evaporation	17.13	2.932
Soluble in water after evaporation	1.83	.313
Insoluble in water after evaporation	15.30	2.619
Silica	2.41	.412

The residue upon ignition blackens slightly along the upper edge. The soluble part is slightly alkaline, due to a small amount of carbonate of sodium, besides which it chiefly contains sodium chloride and sulphate. The insoluble part consists of carbonates of magnesium and calcium, and some silica.

The mineral matter in this water is not higher in amount than is usual in the waters of the region, but it is somewhat peculiar in that quite seven eighths of the total amount present is of an earthy nature, and that chiefly carbonate of magnesia. The saline ingredients are exceptionally low. As it stands, the water would probably exert a slightly laxative effect upon persons of delicate digestion, and might be useful in that direction.

Spring water, from Skyland, five miles south of Wright's Station, Santa Cruz Mountains; sent by Miss Augusta C. H. Weber. The water has a very faintly acid reaction, and contains some free carbonic acid gas.

	Grains per Gallon.	Parts in 10,000.
On evaporation it leaves a total residue of	5.93	1.016
Again soluble after evaporation	1.50	.256
Insoluble after evaporation	3.17	.542
Organic matter and combined water	1.26	.216
The silica (insoluble in acid)	2.66	.456

The residue does not blacken much on ignition. The soluble part has a faintly alkaline reaction, and contains chiefly common salt, with small amounts of gypsum, sulphate of potassium, and a trace of magnesia.

The insoluble part, constituting nearly two thirds of the total mineral matter, consists chiefly of silica, with small amounts of gypsum and the carbonates of lime and magnesia.

This is a remarkably pure water, resembling more a river water (*e. g.*, that of Kings River) than that of a spring, especially in a region where strongly calcareous waters prevail so generally. Few natural waters with so little mineral matter have been found in this State.

Spring water, from a spring near Hollister; sent by Mr. James McMahon of San José. The water is clear, colorless, odorless; the residue left after evaporation does not blacken upon ignition.

	Parts in 10,000.	Grains per Gallon.
Total residue by evaporation	6.165	36.0
Again soluble after evaporation	2.242	13.1
Insoluble after evaporation	2.790	16.3
Combined water	1.140	6.6
Silica	.391	2.3

The soluble part was faintly alkaline, and contained chiefly common salt with some gypsum and Glauber's salt, while the insoluble part consisted of the carbonates of calcium, and magnesium, and silica.

The water of this spring is rather strong in mineral ingredients for many domestic uses, being exceedingly hard; but on boiling, or treatment with lime, comes within the limits of ordinary potable waters. It would probably exert a somewhat purgative effect upon many persons, and might

serve as a gentle aperient, but others may become used to it and drink it without special effects.

Spring water, from near Bryson, Monterey County; sent by D. Sturgis, of that place. "It discharges from sandrock at the rate of eight gallons per hour." The water is clear and odorless, but tastes somewhat flattish.

	Grains per Gallon.	Parts in 10,000.
Total solid residue by evaporation.....	108.87	18.640
Soluble part after evaporation.....	91.24	15.620
Insoluble part after evaporation.....	8.93	1.530
Chemically combined water and small amount of organic matter.....	8.70	1.490

The soluble part consists chiefly of Glauber's salt with chlorides and bicarbonates of the alkalies, and a small amount of calcium sulphate.

The insoluble part consists of carbonates of lime and magnesia, with a small quantity of gypsum.

This water is far too heavily charged with saline purgative ingredients to serve for domestic use. For use as a mineral water, as a purgative, it shares the qualities of too many waters in this State to promise commercial success.

Spring water, from a spring five miles southeast of Coulterville; sent by Phil. Hope, Coulterville, Mariposa County. The spring flows at a rate of three gallons per minute, is not affected by the seasons, and issues from very hard granite. The water has a taste like swamp water; is very hard and alkaline to test paper.

	Grains per Gallon.	Parts in 10,000.
Total solid residue by evaporation.....	24.7	4.230
Again soluble after evaporation.....	4.4	.700
Insoluble after evaporation.....	16.9	2.890
Organic matter and combined water.....	3.4	.580

The soluble part, forming only one fifth of the mineral matter, consists of the sulphate and chloride of sodium, with a not inconsiderable admixture of potassium salts.

The insoluble part mainly of carbonate of lime, with some carbonate of magnesia, gypsum, and a considerable amount of silica.

This is simply an exceedingly hard, calcareous water, which by simple boiling becomes a rather unusually pure spring water, suitable for all household purposes. It can also, of course, be softened by the addition of lime water to the extent of about one tenth.

Spring and seepage waters, flowing from different sides of a cañon, near Camulos, Ventura County; sent by David C. Cook, Esq.

No. 1. Strongly alkaline to test paper; of a light amber color, showing a large amount of dissolved organic matter. Taste, flattish and saline.

No. 2. Also quite alkaline to test paper, but clear and colorless.

The composition was as follows:

	No. 1.		No. 2.	
	Grains per Gallon.	Parts in 10,000.	Grains per Gallon.	Parts in 10,000.
Total solid residue by evaporation	325.8	55.7	369.9	63.3
Soluble part after evaporation	189.7	32.5	243.4	41.7
Insoluble part (carbonate of soda).....	(4.4)	(.7)	(3.1)	(.5)
Chemically combined water, and little organic matter.....	85.7	14.7	76.7	13.1
	50.2	8.6	49.8	8.5

In qualitative composition the two waters are also very nearly alike. The soluble part consists in the main of sulphate of soda, or Glauber's salt, with some carbonate and chloride of sodium (common salt), and a little sulphate of potash; the common salt being somewhat more abundant in No. 2 than in the other.

The insoluble part consists of a mixture of gypsum with some carbonate of lime and magnesia, and a little silica.

Both these waters are altogether too strongly mineral to be used otherwise than as a purgative medicine, mitigated somewhat for the animal system by the carbonate of soda, but rendered more injurious to soil and vegetation by that very fact. They presumably represent the percolates of highly alkaline soils existing at the heads of the cañons.

Spring water, from a spring in the foothills of the Coast Range, in western Tulare County; said to have produced disease in cattle drinking it; sent by L. L. Robinson, San Francisco. The water is clear, odorless, but with a flat, brackish taste; it has a strong alkaline reaction. Considerable residue had settled in the bottle.

	Parts in 10,000.	Grains per Gallon.
Total residue by evaporation	35.680	208.4
Again soluble in water after evaporation	22.600	132.2
Insoluble in water after evaporation	8.762	51.1
Silica	1.644	9.6
Organic matter and combined water	4.300	25.1

The residue blackens somewhat upon ignition. The soluble part was weakly alkaline, and contained chiefly common and Glauber's salts, while the insoluble part was composed mainly of gypsum, with a little carbonate of magnesium and some silica.

This water is by far too strongly mineral to be safely used by either man or beast, being a saline purgative of considerable strength, and unfit for any but careful medicinal use.

The frequent occurrence of saline crusts and efflorescences in the foothills of the Coast Range, from Fresno to Kern County, suggests that care should be exercised in the use of spring waters occurring in this region, for either man or beast.

MINERAL WATERS.

Mineral water, from Mt. Lassen Springs, in the northwest corner of Plumas County; sent by Mr. E. R. Drake, Prattville, Plumas County.

The water is clear, and when fresh quite acid to test paper from free carbonic acid; on boiling the reaction changes to alkaline and the water

becomes turbid. The residue upon ignition did not blacken much. Its contents were:

	Parts in 10,000.	Grains per Gallon.
Total residue by evaporation	8.310	48.54
Soluble after evaporation	1.790	10.46
Insoluble after evaporation	4.840	28.27
Organic matter and combined water	1.680	9.81

The soluble part was quite strongly alkaline and contained chiefly carbonate of sodium, with a small amount of carbonate of potassium and traces of chloride of sodium and gypsum. The insoluble residue contained the carbonates of calcium and magnesium in large quantities, with quite an amount of ferric hydrate and silica, beside a small amount of gypsum.

An alkaline water of moderate strength, with enough of iron (carbonate) to impart to it tonic properties.

"Hot Springs" water, from near the residence of Captain H. E. Boyes, Sonoma. This water has a strong and rather unpleasant odor, partly of sulphuretted hydrogen; it was slightly turbid when received. To test paper it is slightly acid at first, but changes to alkaline on boiling and evaporation.

	Parts in 10,000.	Grains per Gallon.
Total residue by evaporation	9.540	55.72
Again soluble after evaporation	6.445	37.65
Insoluble after evaporation	1.935	11.30
Silica	1.114	6.51
Combined water and organic matter	1.160	6.77

The soluble part has an alkaline reaction, and consists of chloride of sodium with traces of carbonate and Glauber's salts. The insoluble part consists of carbonates of calcium and magnesium, with some ferric hydrate and considerable silica. A saline water of moderate strength and slightly tonic (chalybeate) properties.

Water from Samuel's Napa Soda Springs, Napa County. The analysis of this water was made for the proprietor by Mr. A. H. Weber, with the following result. The water was clear, strongly effervescent, and of pleasant taste:

	Grains per Gallon.	Parts in 10,000.
Total solid residue after evaporation	88.08	15.080
Soluble part after evaporation	30.69	5.254
Insoluble part after evaporation	52.49	8.986
Chemically combined water, carbonic acid, and organic matter ..	4.90	.840
The soluble part consists of: Bicarbonate of soda	32.99	5.648
Sulphate of soda	.25	.044
Common salt	16.87	2.888
Chloride of magnesium	2.38	.408
Potash salts	trace.	traces.
The insoluble part consists of: Carbonate of lime	17.23	2.950
Carbonate of magnesia	7.82	1.339
Carbonate of iron	.78	.134
Silica	4.86	.832

Free carbonic acid gas, 335 cubic inches per gallon.

Mineral water; sent by Mr. Geo. W. Gilmore, Milton, Calaveras County. The water is slightly turbid and slightly alkaline, but becomes very strongly alkaline when boiled.

	Grains per Gallon.	Parts in 10,000.
Total residue by evaporation	12.6	2.172
Again soluble after evaporation	3.0	.516
Insoluble after evaporation	7.4	1.272
Organic matter and combined water	2.2	.384
Alumina, silica and ferric oxide	4.9	.839

The soluble part contains a large proportion of carbonate of soda, with some sulphate and chloride, or Glauber's and common salt.

The insoluble part consists in the main of silica, alumina (phosphate?), and ferric oxide, with smaller amounts of the carbonates of lime and magnesia. The amount of water sent was too small to serve for a full determination in so weak a water; were it stronger it would serve an excellent purpose as an alkaline chalybeate mineral water.

Water from Ojai Hot Springs, near Nordhoff, Ventura County; sent by A. W. Blumberg, the proprietor.

This water is clear, and when fresh, smells strongly of sulphuretted hydrogen, which imparts to it an acid reaction on test paper. As received, the water contained about ten cubic inches per gallon of sulphydric gas.

	Grains per Gallon.	Parts in 10,000.
Total solid residue by evaporation	32.59	5.580
Soluble after evaporation	22.20	3.800
Insoluble after evaporation	4.55	.780
Chemically combined water and little organic matter	5.84	1.000

The soluble part consists chiefly of chloride of sodium or common salt, with small amounts of the carbonate of the same, and of the sulphates of sodium and potassium.

The insoluble part consists of the sulphate and carbonate of lime, with some carbonate of magnesia and a very small amount of the phosphates of the same.

This water is of very moderate mineral strength, and derives its chief value from its sulphuretted gas, as a "white sulphur" water.

D. ARTESIAN WATERS.

Artesian water, from Beckwith, Plumas County, Cal.; sent by Thomas Black, Beckwith. From an artesian well, four hundred and twenty-five feet deep; temperature of water, 89 degrees Fahrenheit. "It has been used for irrigating a garden, and when it overflows the surface and dries off it leaves a white substance on the surface which resembles alkali. We have used it for cooking and drinking, and washing our butter, and for making brine for curing our meat; but imagine that our meat does not keep well with it. Our horses are very fond of it. The substance we send is what adheres to the nozzle of the pipe as it flows from below through

the casings, and a great deal of such sediment forms in tanks into which it flows. There are a great many wells struck in Sierra Valley, ranging in depth from three hundred and eighty to twelve hundred feet. Some of them have the water as hot as 180 degrees Fahrenheit."

	Grains per Gallon.	Parts in 10,000.
Total solid residue on evaporation.....	79.61	13.630
Soluble part after evaporation.....	71.26	12.200
Insoluble part after evaporation.....	6.07	1.040
Chemically combined water and small amount of organic matter.....	2.28	.390

The soluble part consists of a large amount of common salt, considerable Glauber's salt, with small quantities of carbonates of soda, sulphates of potash, lime and magnesia. The insoluble part consists of gypsum, carbonates of lime and magnesia, and silica.

The amount of mineral matter contained is about four times as great as is usually considered compatible with the use of water for irrigation, unless special precautions are observed. The main ingredient is common salt, which is not very injurious unless accumulated in large quantities. This accumulation can be prevented by proper draining from time to time.

Water from artesian well, at Patterson's Landing, two miles south of Alvarado, Alameda County; sent by Mr. William Ryan. Depth of well, three hundred and twenty feet; water clear, and alkaline to test paper, although soft to the taste. The examination gave:

	Parts in 10,000.	Grains per Gallon.
Residue upon evaporation.....	3.828	22.36
Soluble in water after evaporation.....	2.772	16.20
Insoluble in water after evaporation.....	.740	4.32
Organic matter and combined water.....	.316	1.84

The soluble part was very strongly alkaline, and gave a heavy precipitate with lime water, showing it to contain a large amount of carbonate of soda; besides, there were present common salt, Glauber's salt, and very small amounts of gypsum and sulphate of magnesia.

The insoluble part consisted chiefly of carbonate of calcium, with a smaller amount of carbonate of magnesium, some silica, and very small quantities of gypsum and ferric hydrate.

This water, in common with that of other deep wells located near the bay shore, shows the soda carbonate as its characteristic ingredient; while the shallower wells, as well as those lying nearer the edge of the valley, have neutral or but very slightly alkaline waters. The mineral ingredients are not, however, too abundant for ordinary uses, and the water is soft and pleasant to the taste.

Water from artesian well near Borden, Fresno County; sent by A. L. Sayre, of Borden. The well is one thousand two hundred feet in depth. The water is clear, faintly alkaline to test paper, and has a slight brackish taste. It contains:

	Grains per Gallon.	Parts in 10,000.
Total residue by evaporation	142.5	24.410
Again soluble after evaporation	116.3	19.920
Insoluble after evaporation	11.4	1.950
Organic matter and combined water	14.8	2.540

The soluble part consists mainly of the chlorides of sodium and calcium, with a little potassium.

The insoluble part consists in the main of carbonate of lime, with a small amount of silica.

This water is altogether too strongly impregnated with mineral salts for domestic use, and could be used for irrigation only under exceptional conditions. There is no practically feasible way of correcting it.

Artesian water, from Carpinteria, Santa Barbara County; sent by T. W. Ward. From a flowing well one hundred and forty-seven feet deep, in which gravel was reached. "Several families are interested in the result, as they are using the water, and I am laying pipes so that others can do so if it is desirable. Others have wells here, and still others are considering the matter of putting them down, so you see it is a matter of neighborhood interest to find out about the healthfulness of the water." It is clear and tasteless.

	Grains per Gallon.	Parts in 10,000.
Total solid residue by evaporation	28.0	4.80
Soluble part after evaporation	11.8	2.01
Insoluble part after evaporation	13.7	2.35
Chemically combined water and a little organic matter	2.5	.44

The soluble part consists of carbonates and chlorides of the alkalis, with small quantities of sulphates of same, gypsum, and Glauber's salt.

The insoluble part consists of carbonates of lime and magnesia, with a small amount of gypsum and silica.

This is quite a hard water, but not more so than those in common use in the Santa Clara Valley, with which it agrees very closely in composition. In case it should at first disagree with any one, it can be softened either by boiling, or by the use of a little sal soda, or by mixing it with one tenth of its bulk of clear lime water and allowing it to settle.

Water from a bored well, five hundred feet deep, half a mile east of Carpinteria, Santa Barbara County; sent by the owner, P. C. Higgins, who makes the following statement regarding it:

The pipe in this well is one and seven eighths inches wide. The water, we think, comes in about four hundred feet below the surface, from a crevice in rock. The auger passed principally through soft, dry shale—so dry that it was nearly impossible to bore without using water. Combustible gas comes in, apparently, from a crevice below the water. By pumping with a pitcher pump about thirty gallons of water, the gas will heave out some five hundred gallons more, and then will subside until again relieved by the pump. I have arranged to separate the gas from the water as it comes to the surface, and while the water is running we will burn the gas, which makes a very hot fire, burning first blue and then red. We passed

through no beds of sand, and had some thick oil mixed in all the way down. I have had corn grow in the soil that came from four hundred and fifty feet below the surface."

The water is clear and quite saline to the taste. The analysis gave:

	Grains per Gallon.	Parts in 10,000.
Total solid residue by evaporation.....	1253.6	214.56
Soluble part after evaporation.....	1184.9	202.76
Insoluble part after evaporation.....	35.1	6.00
Chemically combined water and small amount of organic matter.	33.2	5.80

The soluble part consists mainly of common salt, with an appreciable amount of carbonates of the alkalies and a small amount of magnesian chloride.

The insoluble part consists of carbonates of lime and magnesia, the latter predominating, also a small quantity of silica.

Artesian water, from "The Palms," Cal.; sent by Howard & Atwater. From a well one hundred and twenty-five feet deep, supplying the public fountain in part. Samples clear; odor of sulphuretted hydrogen perceptible on opening demijohn.

	Grains per Gallon.	Parts in 10,000.
Total solid residue by evaporation.....	32.53	5.57
Soluble part after evaporation.....	14.66	2.51
Insoluble part after evaporation.....	14.78	2.53
Chemically combined water and small amount of organic matter.	3.09	.53

The soluble part consist of chlorides and sulphates of the sodium and some potassium, common salt (sodium chloride) predominating. The insoluble part consists of carbonates of lime and magnesia with small amount of silica.

The mineral ingredients of this water hardly exceed in amount and kind what is admissible in a water for domestic use, although it is exceedingly hard, and might exert a slight purgative effect on persons unaccustomed to it. For such cases it might be softened by the admixture of one tenth of its bulk of clear lime water.

E. RIVER AND IRRIGATION WATERS.

Carmel River water, from the main of the Pacific Improvement Company, Carmel Valley, Monterey County. The water is clear, but shows a marked alkaline reaction.

	Parts in 10,000.	Grains per Gallon.
Total residue by evaporation.....	2.700	15.77
Again soluble after evaporation.....	.920	5.37
Insoluble after evaporation.....	1.375	8.03
Water and a little organic matter.....	.405	2.37

The soluble part is quite strongly alkaline, and contains chiefly chloride of sodium, with a small amount of sodium carbonate, and traces of sulphate of magnesia.

The insoluble part is largely gypsum, with carbonates of lime and magnesia, and some silica. There is no ammonia. An unexceptionable water for either irrigation or domestic use, of moderate hardness.

River water, taken from Owens River at Independence Station; sent by Mr. Emmet Rixford. The water had a brownish tinge, and was very faintly alkaline. Lime water produced turbidity. The water contained:

	Parts in 10,000.	Grains per Gallon.
Total residue by evaporation	2.760	16.12
Again soluble after evaporation	1.284	7.50
Insoluble after evaporation	1.008	5.88
Silica	.404	2.36
Combined water and some organic matter	.468	2.74

The soluble part was very strongly alkaline, lime water producing a heavy turbidity; showing the presence of considerable carbonate of sodium. In addition, it contained considerable common and Glauber's salts, some sulphate of potassium, and a small quantity of sulphate of magnesia.

The insoluble part consists only of carbonate of lime and silica.

This water contains no unusual amount of mineral ingredients, and is fully as well adapted to irrigation purposes as many of the waters so used in the San Joaquin Valley. It contains a rather unusually large amount of potash salts, thus contributing this important fertilizer to the soils on which the water is used. The sample, unfortunately, was too small in amount to permit of a quantitative determination of this substance.

THE WATER SUPPLY OF THE SAN BERNARDINO VALLEY.

The question of an adequate water supply for irrigation purposes is of such capital importance to the southern portion of California that everything bearing on that question assumes exceptional interest. Irrigation, so far as it has gone, has transformed seeming deserts into a maze of gardens, orchards, and orange groves. It is of no little importance to know how far this transformation can go in the future, on the basis of the possible supply of water from all sources—streams, springs, surface wells or sumps, and, finally, artesian or bored wells in which the water either actually overflows, or comes so near to the surface that it can be raised at a small cost.

This question has formed the topic of much discussion in the San Bernardino Valley; and anything that can throw farther light upon the subject is of the utmost consequence to its inhabitants. The natural living waters have been fully appropriated long ago, and the building of the Bear River reservoir for the storage of winter flood waters, at heavy expense, shows the pressing need of farther supplies. Artesian wells, also, have long ago been resorted to; but the extent to which the supply from this source could be developed has never been made the subject of systematic investigation.

The City of San Bernardino lies near the lower end of what is known as the "upper valley," about fifteen miles from its head, on the gentle slopes

of which the towns of Redlands and Lugonia are located. This upper valley seems to be quite sharply defined from the higher and drier lands (such as those upon which Colton is situated) by a sandy ridge running diagonally from the Cajon Pass in a southeasterly direction, and terminating in abrupt bluffs, the base of which is washed by Lytle and Warm Creeks near their junction, about a mile south from the town of San Bernardino.

This ridge is composed of stratified sand and gravel, and is evidence that similar materials have at a former geological period covered part or perhaps the whole of the upper valley, but have since been removed by denudation. At the eastern base of this bluff is a characteristic "cienega," with black alluvial soil, from which water oozes wherever a ditch is dug, and on which are some ponds that retain water during the entire season.

These cienegas form so frequent and so important a feature in Southern California that the question of their origin is of exceptional interest. For from them is derived a good deal of irrigation water even at present, and if it could be shown that they are connected with sources of water supply not merely local, but general, that supply might be utilized to a much greater extent than is now the case.

A cienega is, in general, a spot or tract of moist land, usually characterized by a tree growth of cottonwood, willow, or sycamore; sometimes showing a definite spring or springy place from which water issues or moisture spreads; sometimes simply a general humidity that sustains the growth of the water-loving trees, and oftentimes bunches of "tule" or rushes. Wells dug in cienegas always find water; sometimes flowing springs are developed, and of late borings made to various depths in such tracts have been found to yield artesian water in abundance. While in general cienega lands are most commonly low, yet in many places they are found quite high up on sloping uplands, where their appearance excites special remark, in view of the prevailing impression that Southern California is a very dry country.

The Santa Ana River, issuing from its cañon near the northeastern border of the upper valley, traverses the latter rather diagonally, toward the southwest. Its course is marked by a denser growth of trees than is seen elsewhere, although the entire upper valley is more or less dotted with trees, in contrast to the higher lands beyond the cross ridge, which are generally treeless, except where a cienega affords unusual moisture. In the river bottom or flood plain itself, also, clumps of dense tree growth indicate areas of exceptionally abundant moisture. It is, in fact, a series of cienegas, the development of water from which has only just begun; and a special investigation of one of these was made at the request of the proprietor during the April recess of the University, 1889.

The "Victoria" Cienega.

As the development of water on this cienega, undertaken by Mr. Matthew Gage of Riverside, is probably the most extensive and systematic enterprise of the kind in the country, the subject is of general interest; and the results of the observations are here given to the public by permission of Mr. Gage.

As is well known, that gentleman has undertaken to bring under irrigation the higher lands of the Riverside Valley—"East Riverside" and "Arlington Heights"—partly by means of water taken from the Santa Ana River, some miles above the inlet of the old Riverside Canal, but chiefly through the supply derived from artesian wells, a large number of which have been bored by him at various points, but most extensively in

what is known as the "water tract" of his property of two thousand four hundred and thirty acres, named by him the "Victoria Ranch," and located about twelve miles from the head of the valley, and three miles from the City of San Bernardino. It is, therefore, near the lower end of the "upper valley," and by barometric measurement lies about seven hundred feet below the mouth of Santa Ana Cañon, and probably a thousand feet below the mouth of Mill Creek Cañon, at the extreme eastern end of the valley.

The "water tract" above referred to is, in reality, merely an extensive (five hundred and forty acres) tract of cienega land, lying almost entirely within the first bottom of the Santa Ana River, that is here bordered by steep bluffs of alluvial deposits from fifteen to thirty feet high.

Surface and Surface Waters.—The surface of the river bottom is generally sandy, and shows the usual marks of successive changes of the channel, which at some points even now encroaches upon the bordering bluffs, causing them to topple into the water at times of flood. The bottom is sparsely timbered with cottonwood, sycamore, and several varieties of willows, mostly second growth, the larger timber have been cut away. It is noticeable that these trees grow quite impartially on what appears to be arid sand, and on the dense turf of grass and rushes that covers the outer, and as usual, lower portion of the flood plain.

The cause of this uniform distribution of the water-loving trees becomes apparent when we find that in digging almost anywhere to the depth of a few feet, water is encountered; and ditches, partly natural, partly artificial, along the foot of the bluff on either side, soon gather considerable streams of running water. One of these, on the north edge of the bottom (the "Parrish ditch"), had at the time a running stream of one hundred and fifty-seven miner's inches (of four inches head), although greatly obstructed by vegetation and frequently spreading out laterally. A corresponding stream, estimated at about seventy-five inches, was running at the foot of the south-side bluff and reached the river a short distance below. The water enters these streams mostly in the shape of an imperceptible sidewise ooze, so that they seem to grow without reasonable cause. At some points, however, copious springs boil up from below with considerable energy, at once suggesting an artesian rise. Several of the artesian wells now extant have been bored on the site of such springs, whose water still boils up around the pipe, not having apparently any direct connection with the source from which the wells are supplied. A number of similar springs, in which poles may be pushed down to great depths, exist elsewhere in the region, one of the most notable being "Hunt's Spring."

These springs, as well as the streams in the river bottom, mentioned above, are said on all hands to continue to flow without material diminution throughout the dry season; and it is obvious to the observer that the supply thus obtainable from mere surface ditches in the vast "cienega" lands of the Santa Ana Valley is extraordinarily large, and can be made to add considerably to other sources of supply. Certainly not less than three hundred inches of water can thus easily be developed upon Mr. Gage's "water tract," and with lateral ditches this amount can doubtless be greatly increased. A still further increase could, in case of need, be obtained by pumping from pits, as is done in the Sacramento Valley.

It is instructive to note that the present large supply of the Riverside Water Company's canals, viz.: the entire volume of Warm Creek, originates in manner very similar to that mentioned in connection with the Parrish Ditch. The sources of Warm Creek lie in cienegas in the level valley, miles away from the foothills and unconnected with the summer

flow of the cañons of the north border. From small springy places, *e. g.*, near the Harlem Springs Hotel, and in other localities, there issue little rivulets which, without the inflowing of any tributary worth considering, increase in the course of eight miles to a volume of two thousand five hundred to three thousand inches, constituting during the summer season the bulk of the flow of the old Riverside Canal. This case exemplifies strikingly the unusual abundance of water lying near the surface in this portion of the valley.

ARTESIAN WELLS.—In the borings made in the "Water Tract" there was usually penetrated from twenty to fifty feet of alluvial soil and sand, the latter gradually increasing in coarseness downwards and bearing more and more and larger gravel, until at the depth of ninety to one hundred feet the material was largely cobbles of considerable size, rendering boring very difficult, and at times, when a vigorous flow of water was struck, resulting in the forcible ejection of stones almost filling the (seven-inch) pipe. It being found very difficult to reach any considerable depth with so small a diameter of pipe, the ten-inch borehole has now been adopted as the regular size on these lands. It has been noticed that the size of the cobbles decreases towards the sides of the valley, where greater depths are easily reached, while here two hundred and eleven feet is the greatest depth attained with a ten-inch bore, and most of the good wells range from about one hundred and forty feet upwards.

The interspaces between the cobbles are everywhere found filled with sand and gravel; and the water-bearing gravel beds alternate with more or less impervious beds of clayey material or hardpan, at intervals varying from a few to fifteen and more feet. As each additional layer of impervious material is penetrated by the auger, the rise of water is more energetic and copious. But the gravel beds continue to the lowest depth reached; and, according to the usual rule, they probably fill the depths of the valley to the bedrock. How deep this may be we can but conjecture from the steepness of the granite slopes that form the sides of the valley, and from the fact that a borehole situated not far from the mouth of the San Timoteo Cañon, on the southeast corner of the valley (where the Southern Pacific Railroad ascends to the Gorgonio pass), the depth of eight hundred and fifty feet was reached while the auger was still bringing up the sandy and gravelly clay characterizing that cañon; in contrast to the streams entering the valley from the north and northeast, that discharge only cobbles, gravel, and sand.

Details of Water Discharge.—As an illustration of the supply that may reasonably be hoped for under the conditions here existing, a detailed enumeration of the groups and individual wells thus far flowing, or ready to flow, on the "water tract" of the Gage system is given below. The tables show the number in each group, diameter of pipe used, distance of wells from each other, and the water discharge of each. Both the lettering* of the groups and the numbering of the wells proceeds up stream, or from south to north, as the case may be.

Group "A."

Six wells, in line along the canal, the nearest being two thousand four hundred feet south from the headgate, and the total distance from No. 1 to No. 6, one thousand six hundred and sixty-five feet.

*The lettering is the same as that used by State Engineer Hall in his report on Irrigation in South California, p. 251; but the number of wells has been increased since.

NO. OF WELL.	Distance from Well Next Above—Feet.	Diameter of Pipe—Inches.	Water Discharge— Miner's Inches.*
1 -----	249	10	36
2 -----	304	10	68
3 -----	323	10	35
4 -----	722	10	18
5 -----	67	7	52
6 -----		7	46
Total for group -----			260

Group "B."

Six wells, occupying an area of somewhat less than one tenth of an acre (three thousand nine hundred square feet), distant one thousand two hundred feet from the headgate in a northwest direction; distant from (center of) group "A" three thousand two hundred and seventy-six feet.

NO. OF WELL.	Distance from Well Next Above—Feet.	Diameter of Pipe—Inches.	Water Discharge— Miner's Inches.*
1 -----	15	7	28
2 -----	15	7	17
3 -----	40	7	36
4 -----	50	7	39
5 -----	40	7	63
6 -----		7	20
Total for group -----			225

Group "C."

Four weak wells, all with seven-inch pipe; among the first bored, and left as they are, with an average depth of only one hundred and ten feet; on account of difficulties encountered in the cobble layer at bottom, for overcoming which, tools were not at hand at the time. The wells are between ten and eighteen feet apart only, and yield from seven to twelve inches of water each—total thirty-five inches. Doubtless the product of a single ten-inch well successfully sunk to one hundred and fifty feet at this place, would exceed the present flow of the four shallow wells.

This group is distant four thousand five hundred and fifty feet northeast from group "B," and two thousand one hundred feet northwest from the center of group "D."

Group "D."

This group consists of eleven wells, all with ten-inch pipe, and ranging in depth from one hundred and ten to one hundred and sixty feet. Nine are located on the south side and mostly quite near to the river bed; two are near the north bank, one being in the present bed. The distance between the centers of groups "A" and "D" is about five thousand eight hundred feet; between "D" and "B," two thousand four hundred feet. The average elevation of "D" above group "B," is about eighteen feet; above "A," thirty-one feet.

* Fifty miner's inches, under a four-inch head, are equal to one cubic foot per second.

No. of Well.	Distance from Well next above—Feet.	Water Discharge— Miner's Inches.
1	80	51
2	687	51
3	117	43
4	139	55
5	566	82
6	315	65
7	42	35
8	440	22
9		37
10	300 (to No. 3 and No. 11)	56
11		74
Total of group		571

Recapitulation.

Group "A" discharges	260 miner's inches.
Group "B" discharges	225 miner's inches.
Group "C" discharges	35 miner's inches.
Group "D" discharges	571 miner's inches.
Total for the twenty-seven wells	1,091 miner's inches.

All the measurements recorded above correspond to the condition of the wells about thirty-six hours after all had been uncapped and had been running their full streams.

This point is some importance, because measurements made immediately, or soon after uncapping a well that has remained closed for some time, show at first a considerably larger discharge, evidently due to accumulated pressure, or what might be called a "local head," requiring some time to run down to the normal discharge.

Degree of Interdependence of these Wells.—The extent to which the discharge of any well or group of wells is influenced by that of others situated at a greater or less distance, is a question of great practical interest, since upon the answer depends the aggregate amount of water to be expected from the farther development by the boring of additional wells. I have tested the point in a variety of ways, the more important being the following:

1. Well No. 6, in group "B," had for some time past remained capped with an inch pipe carrying the water supply to a dwelling-house some three hundred yards away; the water reaching the level of twenty feet six inches above the casing when all the other wells of the group are capped. It was found that when all the other wells of the group are uncapped, the water level at the house falls about three feet seven inches. As stated above, the total flow of the wells of this group is two hundred and twenty-five inches; that of No. 6, twenty inches; it is distant only forty feet from the well No. 5, having a flow of sixty-three inches, and all the rest of the group lie within one hundred and thirty feet. Yet the measurement shows that the opening or shutting-down of a flow of two hundred and five inches, or ten times the amount of the flow of No. 6, influences it only to the extent of not quite 18 per cent, or $1\frac{3}{4}$ per cent of the total flow concerned.

2. Well No. 2, of group "D," had been steadily running for more than a year, all the rest of the group, as well as those of groups "B" and "C," being closed; it was discharging about sixty-one inches. After nine other wells (Nos. 3 to 11 inclusive) had been uncapped, No. 2 was found to have

decreased to fifty-seven inches in the course of about three hours. On opening No. 1, within eighty feet of No. 2, its flow suddenly fell off to fifty-five inches, and forty-eight hours afterwards it had reached its minimum flow of forty-eight and four tenths inches; which, however, five hours after was found to have risen again to fifty-one, the figure adopted in the table above. Such fluctuations of a few inches appeared at measurements made at different times of the day, in almost all cases of strong flow; possibly as the result of barometric variations or other diurnal causes.

It will be seen that in the case of this well the letting loose of five hundred and twenty inches of water within an area of seventeen acres surrounding it, caused a decrease of the flow it had when running by itself, of only ten inches, being about one sixth, or 17 per cent, of its own flow when all were closed, and $1\frac{3}{4}$ per cent of the total discharge of the group. This result agrees very closely with that obtained in the case of well No. 6, of group "B," reported above.

3. After all the wells had reached a state of constant discharge, the six hundred and six inches of groups "C" and "D" were shut off at about 5 p. m., in order to observe the effects on the other groups.

Group "B" was measured at 10 p. m., and was found to be discharging two hundred and eleven inches; six hours before, when all the other wells were still open, the discharge was two hundred and five inches, showing a difference of six inches, apparently caused by the shutting down of the aggregate of six hundred and six inches at a distance averaging a mile. This is a very slight effect, at best, being less than 1 per cent of the total discharge shut off, and only $\frac{3}{4}$ per cent of the total discharge concerned. But the fact that on the morning of the same day the discharge of group "B" was found to be two hundred and fifteen inches, renders it doubtful that even the effect observed was directly due to the shutting down of groups "C" and "D." Unfortunately time did not permit of the continuation of the observations so as to settle this point definitely.

On the following day, eighteen hours after the shutting down of all the other groups (representing an aggregate of eight hundred and thirty-one inches at an average distance of about five thousand feet), group "A" was remeasured. It was found that the discharge of well No. 1 had decreased from thirty-six to twenty-nine inches, evidently in consequence of being loaded down with a quantity of gravel that had slid in from above, the pipe having sunk below the ground level. In the rest of the group (Nos. 2 to 6) there had been an increase over the discharge observed in the afternoon of the previous day, from two hundred and twenty-four to two hundred and thirty-three inches; a difference of nine inches, or 4 per cent in the total discharge of the group, but only .37 per cent, or a little over a third of 1 per cent of the total discharge concerned. In view of the daily variations noted, it must here also remain in doubt to what extent the difference observed is due to the closing of the other wells.

4. A striking proof of the relative independence of these wells of one another, when situated reasonable distances apart, is found in the "local head," or accumulation of pressure that takes place so soon as an individual well or a group of wells is shut down. Measured immediately after uncapping a well that has remained closed for some time, the discharge is found to be, in strong wells, from about 15 to 18 per cent; in very weak wells, such as some of group "C," as much as 36 per cent more than that to which the well finally settles down after a lapse of from twenty to thirty hours. This accumulation and slow running-down of pressure proves that these vents cannot be considered as connected by a hydrostatic pressure-column pure and simple, as is sometimes the case. Manifestly the mass

of water is so subdivided by the frequently close-packed materials intervening, laterally as well as vertically, between the vents made by the auger, and in the interspaces of which the water is stored, that a rapid transmission of pressure is not possible, and that the laws of hydraulics and friction so materially modify the hydrostatic effect as to essentially govern the actual discharge of each well. Moreover, the facts observed prove that hundreds of inches of water-discharge bear but a very small ratio to the total supply that lies behind these artesian fountains.

The Substrata of the Valley.—The nature of the materials underlying the valley at large, below the alluvial silt and sand, is shown by the auger to be gravel, ranging from pea size to cobbles of larger diameter than even the ten-inch casings of the wells, more or less tightly packed with sand of varying degrees of fineness. Cobbles nearly filling the large pipes have, as before stated, repeatedly been ejected by water pressure. The character of these cobbles cannot be mistaken; they represent the same rocks that are now brought down from the cañons of the Mill Creek and Santa Ana River, at the head of the valley, where a wilderness of the same materials, ranging all the way from sand to boulders four and five feet in diameter, cover many square miles of actual surface, and are exhibited in every break of the country. There, as well as in the borings, occasional sheets or strata of clay or other impervious materials alternate with the gravel deposits; and it is known that with the penetration of each such impervious layer additional water pressure is obtained in the wells. It can scarcely be doubted that the sources of Warm Creek, and such outflows as Hunt's Spring, above mentioned, indicate either the termination, or the perforation from some cause, of such impervious water-shedding strata near the surface, and that the origin of all these waters is essentially the same.

Source of the Water Supply.—A consideration of the above facts leads us directly to the solution of the question regarding the derivation of the water supply. What we now see happening during the rainy season at the mouths of the cañons has happened from time immemorial; the original depths of the San Bernardino Valley have been filled up to within twenty or thirty feet of the present surface, with just such masses as we now find surrounding the mouths of the cañons, and this immense mass is filled with water, annually replenished during the flood season, by the absorption of a portion of the water issuing from the mountains, the rest passing directly to the sea. The Santa Ana River issues from its cañon about twelve miles above the head of the Gage Canal; by barometric measurement it descends about seven hundred feet in that distance, while Mill Creek issues several hundred feet higher still. The water absorbed by the gravel masses, and afterwards confined between successive clay sheets, might at the headgate, in a well two hundred feet deep, be under nearly a thousand feet of pressure from the head of the valley. No such degree of pressure can, however, manifest itself, because of the enormous friction opposed to any movement, and doubtless also because of a steady though slow seepage toward the sea, which relieves it below. It is this steadily moving column that the artesian auger intercepts and taps; and the question naturally presents itself whether, and to what extent, boreholes made in the lower part of the valley would be likely to deplete those located higher up, as would ordinarily be expected.

While in the absence of more exact data a close calculation in the premises is not possible, the observations made in regard to the effects of wells and groups of wells upon each other's flow suffices to show that such

depletion is not at all likely to happen; on the contrary, under existing conditions it is probable the boreholes tapping the slowly moving column higher up the valley will, when tapping the same water-bearing stratum, have somewhat the advantage of those located lower down. But as the latter are more likely to reach the lower portions of the water-bearing mass, and as the extent of that mass is so great, it is not likely that the calls made upon the great stock will, for some time to come, be such as to create serious interference. This conclusion is the more probable, as in case of any material lowering of the water level at the head of the valley, the absorption during flood time would doubtless be increased in a certain ratio to that lower level, and a larger proportion of flood waters would be stored instead of rushing uselessly to the sea. To some extent, therefore, the increased demand would doubtless be offset by an increased supply.

That such absorption does actually occur in the cobble beds at the cañon outlets, is plainly shown by the tunneling operations which have been undertaken at that of the Santa Ana River, as well as on Mill Creek, for unappropriated water. Water was found in these workings at from twenty to forty feet, but not in very large supply, the leachy bottom also causing much loss, as might be expected; yet the water supply for the nascent town of Mentone has been thus obtained from the Mill Creek gravel bed.

Appearances indicate that no very large accession of either water or gravel comes or has come from the most southern of the three watercourses entering the head of the valley, viz., the San Timoteo. Clay and silt with but few cobbles form, and in the past have formed the deposits from that stream; so that in a well sunk to the depth of eight hundred and fifty feet, near Brookside Station, on the Southern Pacific Railway, nothing but such clayey material with a little gravel has been found. But in a well bored by Mr. Gage near Mound City, three miles farther down the valley, the gravel and cobble beds were met with at about one hundred and twenty feet. We are therefore justified in considering the whole width of the valley as being occupied by the water-bearing gravel; and thus an area of about ten by fourteen miles, filled with water-bearing deposits to unknown depths, assuredly not less than one thousand feet, must be assumed as representing the water reserve, replenished during each rainy season. This enormous mass has thus far been tapped to no greater depth than two hundred and eleven feet (the maximum depth of any of the wells on the "water tract"); and in comparison with it, the water discharge from all the wells, and even that of several times their number, appears quite small.

Besides the main affluents of the valley, mentioned above, the smaller streams issuing from the north side of the valley, viz., Plunge, City, and Lytle Creeks, as well as Devil's Cañon, doubtless contribute something towards the general store of water by absorption into the gravel beds through which they have cut their present channels; and in flood-time these contributions may be very considerable.

Possible Production from a given Area.—While, of course, there must be in every artesian basin or storage mass, a limit beyond which the multiplication of boreholes fails to add to the total discharge, it is of interest to estimate on the basis of the facts recorded above, the possible product of an area advantageously situated, as is the "water tract" of the Gage system, *in the trough of the valley*. For such estimate group "D" can most fairly serve as a basis, as it contains the largest number of wells (eleven), most uniformly distributed, and all of the same diameter of ten inches, which, as stated above, is the minimum width that should be used here.

The extreme dimension of the rectangular area obtained by multiplying together the greatest longitudinal and lateral distances of any two of the eleven wells, is nineteen hundred by four thousand feet, equal to about seventeen acres. If we increase these dimensions by adding to each, one half of the average distance between the wells of the group (*i. e.*, one hundred and sixty-eight feet), the area that on ample allowance may be considered as occupied by these eleven wells would become twenty-seven acres, or one twentieth of the whole tract (five hundred and forty acres). Multiplying by twenty the total present discharge of the group—five hundred and seventy-one inches—we obtain as the possible product of the tract from artesian sources, eleven thousand four hundred and twenty inches of water.

If we apply the same method of calculation to Group "A," using the corresponding figures (sixteen hundred and sixty-five by two hundred and seventy-seven), we find that they may be estimated to occupy an area of eleven acres, being nearly the forty-first part of the total area. Multiplying by forty-one the product of these six wells, being two hundred and sixty inches, we come to a result not far different from that obtained in the case of group "D," to wit, ten thousand six hundred and sixty inches for the whole tract. Averaging the distances between the wells of the respective groups to three hundred feet, we should, upon the above basis, obtain from two hundred and seventy wells, each occupying about two acres of ground, about ten thousand inches of water.

When it is considered that the experiments made have failed to show unequivocal evidence of *any* influence of the several groups upon each other, and that in the case of well No. 2, of group "D," the joint influence of ten neighboring wells within an area of twenty-seven acres, when in full flow amounted to only 17 per cent, or $1\frac{3}{4}$ per cent of the total discharge of the group; and when it is farther considered that the deepest well thus far bored on the "water tract" in question has only reached two hundred and eleven feet out of the great depths still remaining untapped, it would seem that the above calculation does not necessarily exaggerate present possibilities, whatever might be the ultimate result of a very great or indefinite multiplication of boreholes elsewhere in the valley. Even with an allowance of 50 per cent discount on the above estimate for the "Victoria" cienega, it and similar ones that may hereafter be developed, will remain of first-class importance as sources of irrigation water.

The very large size of the cobbles encountered *here* indicates that the present flood plain practically coincides with that of ancient times in which the subterranean stream still moves, and is tapped most readily, and toward which, rather than to the sides of the valley, it will always tend. Whether this coincidence of the modern watercourse with the ancient one is general or only local, cannot be determined from the facts now known. The general conformation of the country admits of the supposition that the original great stream flowed directly from the head of the valley toward Los Angeles, and that the segregation of the Santa Ana and San Gabriel Valleys into separate drainage systems was a comparatively late event. If so, the main subterranean stream may still follow the old channel, and could then be tapped by deep borings at points on the line between San Bernardino, Pomona, and Los Angeles. If, on the other hand, there never was a direct flow from San Bernardino Peak to Los Angeles, the most productive wells would still have to be sought in or near the present axes of the two valleys.

Considering the conditions set forth above, in connection with the large watershed and extensive area of absorption and storage, we may reasona-

bly expect that, until the ratio of the artificial outflow to the natural supply shall be very materially increased, the boring of additional wells in such favorable localities will continue to yield remunerative returns, and to increase very greatly the available water supply of the valley.

In this connection it should not be forgotten that the water power from higher-lying wells may be made available for raising to higher ground either the water from wells not having a sufficient rise, or that derived from surface ditches, or even from the river itself. Thus in the case of the "water tract" specially examined, the five hundred and seventy-one inches emerging from group "D" at an elevation of nearly twenty-eight feet above the headgate of the canal, might be very effectively used in pumping water from low-lying sumps in the river bottom, up to an available level.

While there is reason to expect that the river bottom will furnish the largest outflows, experience has amply shown that boreholes sunk even quite near to the edges of the valley yield good results, and may generally be relied upon for a generous domestic supply. Locally, and in the lower part of the valley, outflows adequate for irrigation purposes may doubtless be had on the higher lands, also.

Chemical Composition of the Waters.—It is of interest to compare the mineral ingredients of these waters among themselves as well as with those of others of similar origin in the State; for it is well known that while some of the artesian waters thus far obtained are very pure, others again are so highly charged with mineral matters as to render their use for irrigation impracticable, especially in presence of "alkali" salts already preëxisting in the soils.

The subjoined analyses of two waters from artesian wells of the "Gage system" and of the water of Warm Creek (constituting the main bulk of the Riverside Canal), make a very favorable showing for the water supply of the San Bernardino Valley:

Analyses of Waters from San Bernardino Valley.

Composition in 10,000 Parts.

	GAGE SYSTEM—ARTESIAN WELLS.		WARM CREEK.
	Group D, No. 5.	Group A, No. 2.	At Mill.
Total residue	1.911	2.266	2.604
Soluble part	.418	.488	1.119
Sodium chloride (common salt)	.063	.091	.257
Sodium sulphate (Glauber's salt)	.193	.313	.582
Sodium carbonate (sal soda)	.102	.021	.200
Potassium sulphate	.060	.063	.080
Insoluble after evaporation	1.493	1.778	1.485
Calcium sulphate .....	.....	.078	.146
Calcium carbonate	1.017	1.212	.762
Magnesium carbonate	.232	.249	.253
Silica	.244	.239	.324

Summary Statement in Grains per Gallon.

Total residue	11.16	13.23	15.21
Soluble part	2.44	2.84	6.53
Insoluble after evaporation	8.72	10.38	8.67

In order to appreciate the meaning of the above analyses, it should be understood that of the solid contents of the waters the portions designated as "insoluble after evaporation" are not only either unobjectionable or useful to vegetation, but are in a short time absorbed and retained in the soil; their tendency is to render the water "hard" in domestic use, but their quantity in all three waters is very moderate only; considerably less, for example, than is found in the waters of the Santa Clara Valley, and in the Coast Range generally, where twenty and more grains per gallon, of which two thirds of the "insoluble" character, is of common occurrence.

Most important to the irrigator, however, are the "soluble" or saline ingredients, which when in large amounts represent so much "alkali" added to a soil perhaps already alkaline. It will be seen that these ingredients are in the well waters represented by the very small amount of about two and two thirds grains (taking the average), being only a little more than is found in the water of Kern River, and about one third of the corresponding contents of the Los Angeles River, the latter having seventeen and one half grains of total mineral contents.

It will be noted that the water of Warm Creek, while having no more of the "insoluble" or earthy ingredients than the wells, carries more than twice as much of the "soluble" or saline compounds; whether originally or from outside accessions, is not clearly apparent from the nature of the salts. The quantity of the latter is not yet large, and is, moreover, of little consequence in the porous and well-drained soils of Riverside.

There is, however, one point that must not be passed over in the valuation of these waters for irrigation purposes. It is the unusually large proportion of *potash* salts contained in them, which, at the rate at which water is commonly used in that region, say one inch to five acres, will amply suffice to provide all that most crops require of that important fertilizer. For with the full use of one-fifth inch through each year (corresponding to a rainfall of nearly thirty-five inches), each acre would currently receive no less than forty-seven pounds of potash sulphate, worth over \$1 65 at wholesale, from the well water, and about sixty-three pounds of the same from the creek water. Considering the quality of their soil, this means that the purchase of potash fertilizers will hardly ever trouble the irrigators of Riverside.

Cienegas of the Chino Ranch and of the Pomona Slope.—During a short sojourn at Pomona, I had occasion to observe cursorily, under the courteous guidance of Mr. H. A. Palmer, the conditions of water supply in that region.

The Pomona settlement occupies a gentle southward slope descending from the direction of the cañon of San Antonio Creek, which drains the slopes of "Old Baldy" and San Antonio Mountains. On the Pomona slope there are numerous (mostly small) *cienegas*, characterized by sycamore, cottonwood, and willow trees, and showing a growth of grass and tule throughout the season. In some of these, flowing springs actually exist; in others, artesian wells have been successfully sunk, contributing materially to the irrigation supply of the settlement. It is probable that here the waters of the cañon have played the same part as have those of Mill Creek and Santa Ana River in the upper valley, first depositing great gravel beds in front, and then filling them with its waters, which find local outlets in the *cienegas* and apparently a more general one in the plain occupied by the great Chino Ranch, finally joining the Santa Ana River below South Riverside. On the latter, copious natural springs and a large area of moist lands, on which drainage rather than irrigation is called for, and in which ditches

find the same general and abundant seepage referred to in connection with the "Victoria" water tract, create a surprise to those who have heard so much of the "dry southern country." The natural remark called for is that if only all this water could be suitably distributed over the higher lands, there need not be an acre of unirrigated land in that fair valley.

As Pomona is situated on the divide between the waters of the Santa Ana and San Gabriel Rivers, the precise derivation of this abundant moisture is somewhat uncertain, and is a question of no mean practical importance. The geological nature of the western border of the valley proves that no large accession to the waters of the region can come from that direction; and the head of Chino Creek, like that of Warm Creek, lies in a nearly level country and seems to have no particular beginning. A systematic investigation of the structure of this region would probably lead to important results, in respect to additional sources of water supply available for the irrigation of the higher lands.

THE LAKES OF THE SAN JOAQUIN VALLEY.

The rapid contraction by evaporation of the three lakes of the upper San Joaquin Valley, the consequent concentration of their waters into alkaline lyes too strong for animal life, and the nature of the soils laid bare on their margins, have formed the subjects of investigation and discussion in former reports of this department, especially in connection with the reclamation and cultivation of alkali soils. (See reports for 1879, pp. 30 to 39; 1880, pp. 12 to 33; 1882, pp. 56 to 60; 1884, pp. 61 to 69; 1886, revised reprint from report of 1880: "Alkali Lands, Irrigation and Drainage in their Mutual Relations," 45 pp.) It is a matter of regret that it has not been possible to pursue the subject by personal visits as systematically as its practical importance and theoretical interest might have warranted; for we are here in presence of a group of phenomena that have been repeated many times in past geological epochs, and for the study of which, in their physical, chemical and biological aspects, opportunity is not often afforded. Hence, while the information and data here given are of necessity incomplete and fragmentary, they are of interest as affording an insight into processes regarding which but little is thus far on record; and their communication may perhaps serve to incite others having the opportunity to do so, to a closer study of the progressive changes.

For a better understanding of the situation in the Kern and Tulare basins, the following statements from former reports are reprinted:

A personal examination of Kern Lake, and of the region lying between it and Buena Vista Lake, as well as of the Mussel Slough country, made under the auspices of the United States census, in March, 1880, satisfied me that in none of these rich agricultural sections could the slightest increase of alkali be safely risked; and analyses subsequently made of the waters of both Kern and Tulare Lakes prove that a very few years' use of the water then filling either of these reservoirs would be promptly fatal to the productiveness of the lands irrigated. As regards Kern Lake, this was obvious enough from a casual examination and tasting of the water. Having been shut off from the natural influx of Kern River for a number of years, it has been rapidly evaporating and receding from its former shores, so that at the time of my visit a difference in level of over four feet had been produced in fifteen months, leaving high and dry a boat wharf built at that distance of time. About eighteen months before all the fish and turtles in the lake had suddenly died, creating a pestilential atmosphere by their decay; and even the mussels were now mostly dead, a few maintaining a feeble existence. A strong alkaline taste and soapy feeling of the water fully justified their choice of evils. The tule marsh, laid dry by the recession of the lake, was thickly crusted with alkali, and the tules were dead, except where still moistened by the water of the lake, showing that the latter was not yet too strong for such hardy vegetable growth, albeit fatal to animal life.

Buena Vista Lake was stated to be in a similar condition, but not yet quite so far advanced in evaporation, and still maintaining some animal life in its waters, having lost its connection with the river more recently. Tulare Lake is well known to be full of fish,

and as it annually receives the overflow of Kern and the regular inflow of Kings River, its evaporation and recession has been much slower; yet its water's edge is now distant several miles from the former shore line, and as the water of the rivers is more and more absorbed by irrigation, it will doubtless continue to recede until a point is reached at which the regular seepage from the irrigated lands will balance the evaporation. This epoch would seem, however, to be quite in the future as yet, for the rate of recession has, apparently, not sensibly changed in the last few years. It is not likely in any case that the water of the lake will be more abundant or less impregnated with mineral matter than is now the case, at the time when the state of equilibrium shall have been reached.

With the lights now before us, it can hardly be regretted that the old Westside ditch, which was to irrigate the lower country with the corrosive waters of Tulare Lake, was not successful. The lake level is now several feet below the bottom of that outlet, and the lake keeps receding annually, and its alkali becomes stronger as the mass of the water decreases. It is difficult to say where it will stop; but if, as is probable, a state of equilibrium is reached whenever the waters of Kern and Kings Rivers shall have fully filled the parched depths of the plains by a more general system of irrigation, it is not at all probable that the lake water will thereby become fresher; on the contrary, such seepage water will be likely to bring into it the alkali now dried up in the lower strata, and the annual evaporation will concentrate the solution more and more. It would certainly be most desirable to utilize the lake as a great reservoir for irrigation supply; but to render this practicable, it would be necessary to first empty out or displace the mass of alkaline water at present occupying the basin. The discussion of the feasibility of such an undertaking, however, belongs to the province of the engineer corps.

The analyses referred to above gave the following results (in grains per gallon):

	Kern Lake.	Tulare Lake.
Date of taking sample.....	March, 1880	January, 1880
Total solid contents.....	211.50	81.80
<i>Soluble after evaporation</i>	182.75	71.16
Potassium sulphate.....		3.24
Sodium chloride (common salt).....	115.41	22.77
Sodium sulphate (Glauber's salt).....		
Sodium carbonate (sal soda).....	64.37	27.92
<i>Insoluble after evaporation</i>	9.29	8.36
Calcium carbonate.....		2.97
Magnesium carbonate.....		4.95
Silica.....		.44
Organic matter and water.....	22.43	2.28

To convey to those unaccustomed to the consideration of such matters an idea of the meaning of the above figures, it may be stated that the solid contents of river waters vary usually from five to twelve grains per gallon. The water of Tulare Lake, where it is undiluted by the inflow of Kings River, is therefore about ten times, and that of Kern Lake about twenty-six times, stronger than an average river water. Even this, however, conveys but an inadequate idea of the relation sustained by these waters to organic life. The average sea water (containing mainly common salt) is about ten times stronger than the water of Kern Lake as regards its solid contents; yet in sea water fresh water fish live freely during part of the season, while in Kern Lake the fish died at a time when, according to a minimum estimate, the water must have had about twice the strength of Tulare Lake, or about one thirteenth of the strength of sea water. This shows strikingly the deadliness of the Kern Lake alkali as compared with sea salt, or, in other words, of Kern Lake water as compared with tide water.

Condition of the Lake Water in June, 1888.

Early in June, 1888, at my request, Mr. B. F. Moore, Patron of the Experimental Station near Tulare City, sent a messenger to obtain a sample of the lake water in order to ascertain the progress of evaporation. The sample was taken two and one half miles out in the lake, eight miles east of the mouth of Kings River, not far from the Cross Creek fisheries.

The water had a general greenish turbidity and considerable greenish sediment at the bottom of the bottles. This sediment showed under the microscope an abundance of green cellular plants, mingled with adherent fine silty matter, partly silicious, partly calcareous.

A partial analysis of this water by Assistant Geo. E. Colby, resulted as follows:

	Grains per Gallon.
Total solid contents.....	204.7
Soluble after evaporation.....	186.9
Sodium carbonate (sal soda).....	74.3
Insoluble part.....	3.7
Organic matter and water.....	14.1

The qualitative analysis of the soluble and insoluble parts showed the same ingredients as found in the previous examination.

It will be seen from a comparison of this analysis with those made in 1880, that the solid contents of the lake water had increased very nearly two and one half times in the eight years, and that its concentration approximated closely to that of Kern Lake in 1880. Yet it appears that an abundance of fish survived, at least of certain kinds, although, as will be seen below, the mussels had already succumbed.

The Condition of Tulare Lake in Winter of 1888-9.

Having been informed in November, 1888, that "the fish in Tulare Lake were dying by shoals," I concluded that the water of that basin had, by evaporation, at length reached the limit of endurance of its inhabitants, who had probably found themselves unfit to survive the altered surroundings. Desiring to verify the facts, I, in January, 1889, made arrangements to visit the lake in company with Mr. J. G. Woodbury, of the State Fish Commission; but being delayed by imperative duties, I requested Mr. Woodbury to proceed alone, and while making his observations on the economic side of the question, to collect a sample of water and such other data as might present themselves. He accordingly visited the northeastern part of the lake, near the mouth of Cross Creek, during the first week in February, and on his return communicated to me the following interesting account, which is here reproduced by his consent:

On the train I met several gentlemen who live along the railroad, opposite the lake, and was told by them that Tulare City was the best place to start from for a visit to the fishing grounds. I engaged team and driver to take me to the fishery near Cross Creek, a distance of about twenty-five miles, according to the driver's statement, and not less than twenty by my own estimate. At this point the lake receded last year about half a mile, and in consequence the fishermen were compelled to move their position about a mile farther into the lake. Their pound for the fish is half a mile from the shore, and their seine is pulled two and one half miles farther out into the lake. It is afterward pulled in by a horse and windlass located about two hundred yards from the shore, on a platform where the horse is also stabled.

They catch about one hundred and twenty-five pounds at a haul at this fishery; the fish come in on the seining grounds in warm weather rather than when it is cold; and as the same ground is continually seined over, it seems that the fish must travel considerably to keep it constantly stocked.

I inquired about the reported dying of the fish. The fishermen said that it occurred last summer and autumn, and that it was mostly catfish, "greasers," and some of the so-called trout, also some carp, but very few perch. Now, it is the perch that is so much valued by the fishermen; in fact, the perch is what they fish for, as the catfish do not sell so well, and the greasers are of no account. The "trout," of which I did not see any, they say are very soft and do not keep well, also are very insipid.

The perch is certainly a very fine fish, large, bright, and clean-looking; they are very good eating, as I had occasion to verify. These perch have enormous mouths, and in that of every one in the pound can be seen a "shiner" (or "slick," as they call the fish), with the tail sticking out of the great mouth, being drawn farther in as the process of digestion proceeds. One perch which I took along to have cooked, I took by the gills, and looking down his big mouth, I saw the tail of a fish, which I readily got hold of with my fingers and pulled out. It was six inches long and only its head partly digested. The

fishermen say that all these perch when caught have fish in their mouths, in proof of which he pulled out one at random with a dip net, and showed the perch with a shiner's tail still out of the mouth.

The fishermen state that no catfish are now caught, while two and three years ago they would get a wagon load at each haul; also, that trout are now seldom caught, although they used to be very abundant. The men expressed no opinion as to the cause of the death of the fish, but stated that the catfish especially were drifted upon the shore, dead, by thousands.

Catfish, however, are found by millions at present in the creeks and sloughs that run into the lake. A gentleman who lives on his farm fully ten miles from the lake, and who fishes in a small way for his own table, is of the opinion that the destruction of the catfish and carp is caused by their being driven on the shallows by the wind, and left in shallow pools which, when the water recedes, soon become so hot that the fish die. I questioned him very particularly about this; and as he is very intelligent, and his father was a fisherman whom he frequently assisted in his work, his views are entitled to weight. He has a boat and sailed around the lake last summer, and states that the deepest part of the lake, in the channel which runs from south to north in the direction of the old outlet into the San Joaquin River, does not exceed twenty feet; that outside of that channel it is generally not over four feet, gradually shallowing toward the shore. Notwithstanding this shallowness, the action of the wind should mingle the different portions pretty thoroughly and render the alkali about even throughout.

Before starting on this trip he was told that he would have a good wind throughout his journey, as the wind blew from the center of the lake toward the shore. He states that he found it to be true; that he had the wind "abeam" all the way.

The two bottles of water I sent you were taken at various distances, from the shore out to the fish-pound. Although the fishery is located off the mouth of Cross Creek, as there is no water in that creek for several miles out from the lake the water of that portion could not have been perceptibly freshened by its influx at this season, although some seepage doubtless occurs. The water of the lake is very muddy, and has a nasty taste and smell; very much like that of a well about a mile from shore and one hundred feet deep, which was, however, drank by the people at the farmhouse, as well as by their stock, and left them all healthy. One of the horses of my team, however, was relaxed in the bowels all the way to Tulare, and the same happened to the driver and to myself.

All the shore of the lake for miles, as far as I could see, was strewn with mussel or clam shells; the surface of the ground was white with them, and the wheels of the carriage crushed through them as though more than half the substance of the ground was actually made up of shells, as I have no doubt is really the case. They told me that these shells extend here, as thickly as on top, down to the depth of a hundred feet, as shown in the well referred to above. Not a live clam can be found in the lake now.

I have subsequently been informed that ten years ago there were large numbers of live mussels in Tulare Lake, and that the hogs used to live on them then; that they would wade out into the lake and plunge their heads under water, get hold of a mussel and hold their noses up in the air and chew them up.

All the (seven or eight) fisheries are located within four miles of Cross Creek mouth; no fishing is now or appears to have been done near the mouth of Kings River, ten miles to northward, for the reason (according to the fishermen) that the water is too shallow.

For the whole distance of twenty miles from Tulare City the country is of remarkable fertility, almost level, and where put into wheat the growth was strong, even to within two miles of the shore of the lake, where the land had been plowed through solid tule roots. The growth was very compact, strong, and of a beautiful green color, and had stooped out abundantly; which, to my mind, showed that the rawness of the soil or the quantity of alkali had but little effect upon the growth. For long distances among the tules, alfalfa covered the ground. I had no idea of the value and extent of the arable land of Tulare County until I rode over the immense extent of that plain to the lake. I think the time will come when Tulare will be one of the very best of the agricultural counties of the State.

Speaking of the future of the lake—it must have been a good deal lower than it is now, for near the mouth of Cross Creek there are many stumps which were under water only last year, and among which the fishermen used to get their nets entangled; these stumps are now just at the water's edge. Of course they could not have grown under water. Again, in a little surface well near the landing place at the fishery, there is at the depth of about eighteen inches, all around, a ring of blackish organic matter or mold, quite distinct from the yellowish clayey earth both above and below it. It looked as if it might be decomposed tules, and if so, the water must have been off the ground long enough to allow these tules to be decomposed and made into soil. There are now under this water about two hundred thousand acres of land of what might be made the best quality, and this land under alfalfa would be worth many times what it is now under water, for fishes. Why would it not be a good idea to drain this lake down four feet lower, to the banks of that channel, into the San Joaquin River, through a canal that would at the same time serve as a waterway up to that old channel in the lake, through which boats could go with freight? I think that by this scheme in a short time all the surplus alkali would be drained into the ocean from the lake and the surrounding country, for as the fresh water from the mountains is spread over the land it must sink down and gradually push the more alkaline waters down the canal. So the land would in time be freed from alkali and the canal would be kept full by underdrainage, which the lake now receives and evaporates.

Present Composition of Tulare Lake Water.—The sample of water sent by Mr. Woodbury was quite turbid, partly from fine mud, partly from the presence of greenish micro-organisms. Its taste was flattish saline, and quite nauseous to the stomach. Exposed to the light, it soon became filled with rapidly increasing green gelatinous films and cocci, the exact nature of which was not investigated.

Upon filtration, which progressed very slowly, and did not clear the water completely (as is usual with waters impregnated with alkaline carbonates), considerable organic matter still remained in solution, and had to be removed by ignition before proceeding with the analysis. In presence of an excess of carbonate of soda, this ignition could not interfere with the accuracy of the determinations of acidic ingredients.

The result was as follows:

*Analysis of Lake Tulare Water.**

Specific gravity, 1.0050 at 62.5 degrees.

	Grains per Gallon.	Parts in 10,000.
Total solids.....	303.07	51.88
<i>Soluble after evaporation.....</i>	<i>297.97</i>	<i>47.93</i>
Sodium chloride (common salt).....	95.79	16.40
Sodium sulphate (Glauber's salt).....	73.76	12.63
Sodium carbonate (sal soda).....	94.74	16.22
Potassium sulphate.....	15.68	2.68
<i>Insoluble after evaporation.....</i>	<i>6.97</i>	<i>1.19</i>
Calcium sulphate (gypsum).....	1.47	.25
Calcium carbonate.....	1.07	.18
Magnesium carbonate.....	2.55	.44
Silica.....	1.87	.32
Organic matter and water.....	16.12	2.76

Comparison of the Water at Different Periods.

The following table summarizes the composition of the Tulare lake water at the three different periods (in grains per gallon):

	1880.	1888.	1889.
Date of taking sample.....	January.	June.	February.
Total solid contents.....	81.80	204.7	303.07
<i>Soluble after evaporation.....</i>	<i>71.16</i>	<i>186.9</i>	<i>279.97</i>
Sodium chloride (common salt).....	22.77	-----	95.79
Sodium sulphate (Glauber's salt).....	17.23	-----	73.76
Sodium carbonate (sal soda).....	27.92	74.3	94.74
Potassium sulphate.....	3.24	-----	15.68
<i>Insoluble after evaporation.....</i>	<i>8.36</i>	<i>3.7</i>	<i>6.97</i>
Calcium sulphate (gypsum).....	-----	-----	1.47
Calcium carbonate.....	2.97	-----	1.07
Magnesium carbonate.....	4.95	-----	2.55
Silica.....	.44	-----	1.87
Organic matter and water.....	2.28	14.1	16.12

The figures in the above table hardly require comment unless it is to draw attention to the extremely rapid increase of the solid contents of the water between June, 1888, and February, 1889, as compared with the effect produced during the previous seven and a half years. The latter was

*Analysis by Mr. E. M. Hilgard, special student in the Agricultural Laboratory.

about two and a half times, or 150 per cent on the whole, or an average of 13 per cent a year; while in the eight months preceding the last examination, the increase was nearly 45 per cent. It should be noted that these eight months were remarkable for very great evaporation elsewhere on the coast, also; and that they formed the end of three years of rather deficient rainfall in the State. The more abundant moisture of the season just passed may have stopped, or perhaps even reversed the process—a point which will receive attention within a short time. It will then be possible to predict with some degree of approximation how nearly the condition of natural equilibrium between the evaporation from the lake surface and the seepage from the streams and irrigated plains referred to above, is being approached, and to forecast the future of the lake and of its inhabitants if left to themselves.

Whether or not it will be expedient to interfere with the natural course of events, either for the establishment of a great irrigation reservoir, or (as suggested by Mr. Woodbury) for the reduction of the lake to a mere water-way in order to reclaim the lands now covered by it, is a question too complex to be discussed here. The answer will in a measure be determined by the decision of another question, viz.: Whether the increased saline strength of the lake water is due wholly to evaporation, or in part to concentrated solutions of alkali extracted from underlying beds by the inward seepage. If a consideration of the area and depth lost by the lake within the last year shall show that there has been a distinct accession of alkali salts from the outside, the use of the drained lake-bed as an irrigation reservoir will be of very doubtful practicability, as it would imply an annual addition of such salts to those already contained in the natural soils irrigated therewith.

The importance of the latter consideration is made apparent from the results of an examination of a soil from the immediate border of Tulare Lake, near its then (1879) southeast corner, made in 1879 and given in the report for 1879, p. 27.

No. 77—"Dry bog soil," from Tulare Lake; sent by Mr. E. R. Thomason, August 12, 1878.

The specimen was taken from the reclaimed "swamp and overflowed" land, on the east side of Tulare Lake; is inclosed by a levee, and lies below the high-water mark of the lake; eighteen months before it was all under water, but at the time of taking the sample the water was half a mile from the levee. The first vegetation that started after it was laid dry was "wild parsley," followed later by wire grass, salt grass, and tule. The surface at the present time shows no salt and but little indication of alkali. Grain, however, "burns up" when hot weather comes, even though the ground be moist. Garden vegetables look well until blooming time, and then die.

When sampling the soil at the time stated, it was found to be baked quite hard for the first six inches; from that line down to twenty inches, to which depth it was taken, it was "boggy and soft." The soil as received is a somewhat bluish-gray clayey sediment, containing a good deal of small gravel and shells intermixed. Its reaction is alkaline, though not sharply so.

Mechanical Analysis.

Gravel and shells above 0.6 mm. in diameter	4.1 per cent.
Fine earth	95.9 per cent.

Mechanical Analysis of Fine Earth.

Clay.....	29.793 per cent.
Sediment of <0.25 mm.....	13.840 per cent.
Sediment of 0.25 mm.....	1.567 per cent.
Sediment of 0.5 mm.....	2.195 per cent.
Sediment of 1.0 mm.....	8.183 per cent.
Sediment of 2.0 mm.....	8.622 per cent.
Sediment of 4.0 mm.....	9.722 per cent.
Sediment of 8.0 mm.....	6.641 per cent.
Sediment of 16.0 mm.....	2.115 per cent.
Sediment of 32.0 mm.....	2.407 per cent.
Sediment of 64.0 mm.....	1.275 per cent.
	*86.360 per cent.

According to this analysis this is a clay soil, which, however, should till well, in consequence of the uniform distribution of the sediments. It seems, however, to acquire tilth with some difficulty at present.

Chemical Analysis.

Insoluble residue.....	67.34 per cent.
Potash.....	1.05 per cent.
Soda.....	.84 per cent.
Lime.....	6.51 per cent.
Magnesia.....	3.96 per cent.
Br. ox. manganese.....	.04 per cent.
Ferric oxide.....	5.05 per cent.
Alumina.....	7.97 per cent.
Phosphoric acid.....	.32 per cent.
Sulphuric acid.....	.08 per cent.
Organic matter and water.....	3.71 per cent.
Carbonic acid.....	4.42 per cent.
	101.29 per cent.
Humus.....	.468
Available inorganic.....	2.184

This shows the general composition of the soil to be excellent, so far as the important ingredients of plant food are concerned. The amounts of potash and phosphoric acid are equal to those in the most productive soils of the Mississippi bottom, and the large percentage of lime should insure its thriftiness and kindly tillage. But it is evident from its alkaline reaction, and the large percentage of soda shown, that it contains enough of the true "alkali" to interfere seriously with tillage as well as with the welfare of vegetation. At the same time the solution formed by hydrochloric acid showed the want of aeration in giving an indication of iron protoxide. These inferences are, moreover, corroborated by the observation made by Mr. Thomason, that wheat made some fine ears on the upper portion of a part of the levee where, of course, the rain had washed out the soda and the air had had ample access. On the basis of these facts the following advice as to the treatment of the land was given to Mr. Thomason:

First of all give the soil a dressing of at least six hundred pounds of plaster per acre. You will then find that it will till better, and that weeds will grow on it different from those it now bears.

The soil evidently has not had sufficient time and tillage to get thoroughly aired after its reclamation from the waters of the lake. It evidently needs greatly a summer's fallow, and that to the greatest depth that a big plow and a strong four-horse team can go.

If I understand correctly that it was "boggy" at a depth a little below six inches, it is too full of water yet to allow of the healthy life of crop roots. This implies drainage of some kind, and protection against the backwater of the lake.

*NOTE.—The low summation of this analysis is due to the dissolution of lime, and some alkaline salts, in the large quantity of water employed, the clay at first failing altogether to diffuse until these salts had been washed out. The loss bears mainly, of course, upon the fine sediments.

It would seem from the account given of the condition of crops near the lake, in the communication of Mr. Woodbury, that the difficulties experienced in the case of the soil of Mr. Thomason's land do not exist everywhere on the present and ancient lake border. Such differences doubtless arise from location near to or away from the mouths of streams, as against that in bays or inlets, or along the general shore line. But while these various soils may differ in respect to their mechanical composition, there can be little question of their eminent intrinsic fertility when reclaimed from the water and cultivated with due regard to the avoidance of the "rise of the alkali" which not only exists within the sediments themselves, but also (as has been often observed) at some points exists in solid form deposited at some distance beneath the surface. It will therefore require special precautions to cultivate these lands successfully, but their immense stock of native fertility will amply repay considerable care in their management, which can undoubtedly prevent injury from, or perhaps even permanently cure, the surplus of alkali. It should not be overlooked that the latter contains among its ingredients so large a proportion of potash salts, that the cultivator will probably be relieved of the need of replacing this portion of the drain caused by cropping, for an indefinite length of time.

INVESTIGATIONS ON THE PROXIMATE COMPOSITION OF THE SALINE CONTENTS
OF WATERS, AND OF NATURAL "ALKALI."

While the analysis of the mineral portions of natural waters must, when properly carried out, yield identical results in the hands of different chemists so far as the ultimate ingredients are concerned, the exact manner of their grouping, or, in other words, the compounds formed by them in presence of each other, often admits of discussion, and in some cases presents questions of extreme difficulty, requiring the best resources of chemistry and physics for their solution. As in many cases, moreover, the exact nature of the compounds present is of directly practical importance in determining the uses to which waters or alkali soils may or may not be put, I have thought it necessary to investigate more exactly some points which frequently present themselves in the examination of such questions, in this State and elsewhere. These investigations are as yet far from being completed, but have already yielded results of sufficient interest to have formed the subject of a communication to the American Society for the Promotion of Agricultural Science, at its meeting held at Cleveland, Ohio, in August, 1888. This communication was published in the proceedings of that meeting; but the limited circulation of that publication renders it desirable to reproduce it here, although, on account of its somewhat abstrusely technical nature, it may be, in large part, intelligible only to professional chemists. Its very direct bearing upon the important subject of the formation and repression of "black alkali" commends it to the forbearance of unprofessional readers:

On the Mutual Reactions of Carbonates, Sulphates, and Chlorides of the Alkaline Earths and Alkalies.

By E. W. HILGARD and A. H. WEBER.

[In the course of a long series of water analyses made in connection with Geological Surveys and Experiment Station work, I have been struck with the almost invariable occurrence of sulphates (usually gypsum) in the "insoluble residue" obtained by the evaporation of the waters and leaching-

out of the soluble salts. That this should occur in the case of acid or neutral saline waters, almost always containing gypsum in more or less considerable amounts, is natural enough; for even when gypsum is not contained as such in the natural water, it is predicable that it might form in the process of evaporation under various conditions, by double decomposition.

Upon the suppositions ordinarily held, the filtrate from such a residue should have a neutral reaction; the existence of alkali carbonate being supposed to be inconsistent with that of an earthy sulphate or chloride. Only, the alkaline reaction ensuing in the course of time as the result of the slight solubility of calcic and magnesian carbonates, must not be confounded with that which appears instantly, or after a very short lapse of time, when an alkali carbonate is present even in minute quantities.

A common source of error in this connection is the strongly alkaline reaction consequent upon an excessive ignition of the evaporation residue, whereby the earthy carbonates may have been rendered caustic. In order to avoid errors from this source, the residue must always after ignition be recarbonated by means of carbonic acid gas; recarbonation by means of ammoniac carbonate being of course inadmissible in the presence of sulphates.

But after the observance of all these precautions, there still remains a large number of cases in which the leached residue contains gypsum, and yet the filtrate is unmistakably alkaline from the presence of sodic or potassic carbonate. This alkalinity is sometimes exceedingly strong in the unignited residue; it is greatly diminished after ignition, but yet in many cases remains very obvious despite the visible presence of gypsum crystals in the solid residue.

These apparent discrepancies having become especially notable in connection with the analyses of the natural "alkali salts" in the soils of the Pacific slope, it became necessary to investigate the conditions governing them in a definite manner. The more as the use of gypsum recommended by me as an antidote to alkaline carbonates in the soil seemed to be in danger of becoming of doubtful value, though in many cases proved to be of excellent effect in practice.

The investigation of this somewhat complex subject, involving the mutual reactions particularly of alkaline sulphates and chlorides with the carbonates of calcium and magnesium under different conditions of concentration, temperature, pressure, and relative proportion, in the presence of carbonic acid, has been zealously begun by Mr. A. H. Weber, Assistant in the Agricultural Laboratory of the University of California; and the results and discussion of some of the preliminary experiments are here communicated.—E. W. H.]

Concerning the mutual reaction of alkaline carbonates and salts of lime, Rose states pointedly (Pogg. Annalen, vol. 95, p. 289), that the earth salt is precipitated completely as carbonate; and saving the consideration of the solubility of calcic carbonate in water, he recommends this reaction for the quantitative determination of the earth, without special limitation as to dilution.

Yet in 1826 already, Brandes (Schweigger's Journal, vol. 43, p. 156, as quoted in Storer's Dictionary of Solubilities) had called attention to the fact that calcic carbonate is not precipitated from solutions containing only one part in six thousand to seven thousand of water. This effect appears to have been ascribed by him, as well as by Storer and others, in this and other cases, to the "solvent effect" of the soluble salts upon the

calcic carbonate. The nature of this supposed solvent effect is not discussed; but it appears that the data thus obtained for the solubility of calcic carbonate differ widely from those obtained by direct experiment.

These data refer to the "neutral" or mono-carbonates of soda and potash.* But however abundant in the solid state, these mono-carbonates can hardly be assumed to occur by themselves in any natural waters, and least of all in the soil solutions. The air of the soil being always largely charged with carbonic gas, the formation of more highly carbonated alkali salts must be the rule instead of the exception, whenever the conditions for the formation of such carbonates exist.

The unstable bi-carbonates will exist only under exceptional conditions of excess of carbonic acid, as in the case of carbonated waters. Elsewhere we must, as a rule, expect to find mixtures of the alkali mono- and sesqui-carbonates in varying proportions, according to conditions of temperature, supply of carbonic acid gas, and other conditions presently to be considered. It is well known that while the sodic bi-carbonate, for example, readily loses a portion of its carbonic acid on exposure to even a moderately high temperature, the complete expulsion of the carbonic acid in excess of that corresponding to the mono-carbonate, or what is equivalent, the decomposition of the sesqui-carbonate into the mono-carbonate and free carbonic acid, is accomplished only at a low red heat in the dry way, and cannot be brought about by the boiling of the solution.

Hence, the residues from the evaporation of natural alkaline waters will, as a rule, contain a certain variable proportion of sesqui-carbonate whenever in that evaporation the deposition of the earthy carbonates gives proof that excess of free carbonic acid has been present. We are thus obliged, in seeking an explanation of the apparently abnormal occurrence of gypsum in such residues, to consider, not so much the behavior of the earth salts toward the mono-carbonate, but rather towards the more highly carbonated (bi- and sesqui-) compounds, and often in presence of free carbonic acid besides.

How greatly these conditions may serve to change the reactions to be looked for, appears from a simple experiment originally indicated by Alexander Müller (Kgl. Vetensk. Akad. Förhandl., Stockholm, Nov., 1859; Jour. pr. Chem., vol. 82, p. 53), who, however, did not pursue the subject into its ulterior consequences. When a dilute neutral solution of sodic sulphate is brought in contact with calcic carbonate in the powdery form (precipitated, or powdered marble) no reaction ensues. But when carbonic gas is now passed into the mixture, the neutral reaction of the solution soon changes to a decidedly alkaline one, and gypsum passes into the precipitate.

The following is the record of experiments made by us in the premises:

Five grams precipitated calcic carbonate was introduced into solutions of chlorides and sulphates of sodium and potassium having a perfectly neutral reaction and varying in strength from one to ten grams per liter. Carbonic gas was then passed into the solutions at the ordinary temperature, during a time varying from ten minutes to two hours. In all cases a decidedly alkaline reaction ensued, covered at first by the presence of free carbonic acid; becoming perceptible even after a ten-minute treatment, but increasing decidedly with time. Upon the addition of alcohol to the extent of 50 to 60 per cent, a white gelatinous precipitate of gypsum and calcic

* For the sake of simplifying discussion, the compounds here discussed are named and treated as though consisting, according to the older views, of basic oxides, and acids. Whatever view may be held of their ultimate molecular structure, this point of view is almost necessarily maintained in analytical and agricultural chemistry, to avoid endless and pedantic circumlocution.

carbonate formed, becoming crystalline so as to be easily recognized and filtered, after a lapse of twelve hours.

This fundamental experiment, which well deserves a place on the lecture table, is interesting from many points of view. The production of an *alkaline* reaction by the addition of an *acid* is odd enough to our sense of chemical propriety. It becomes still more striking when, in lieu of evolving the carbonic gas outside of the solution, it is set free from the calcic carbonate present in the mixture, by the gradual and cautious addition of chlorhydric acid, taking care to leave a sufficient excess of the earth salt undissolved. Again we obtain a strongly *alkaline* reaction, as the result of the addition of one of our strongest *acids* to a *neutral* mixture.

But its function as a piece of chemical legerdemain is a small part of the merit of this experiment. When it is considered that the two sodium salts—the chloride and sulphate—are the most common and abundant ingredients produced by the leaching of rocks and soils in the process of weathering, while calcic and magnesian carbonates, with free carbonic acid, are almost omnipresent, the possible importance of the reactions between these compounds under varying conditions of temperature, pressure, dilution and relative proportion, is readily appreciated. It is not a little singular that among the many who have investigated the subject of chemical geology, mineral waters, the formation of mineral veins and the chemistry of soils, this remarkable reaction seems to have remained almost unnoticed. Even in the late and excellent work of Storer, we find that the reaction whereby (as is alleged) “a little caustic (*sic*) soda is formed in compost heaps containing a mixture of salt and lime,” is supposed to be dependent upon the porous nature of the materials admixed, rendering a dialytic diffusion and local separation of the soda from calcic chloride possible; since “if lime and salt were to be mixed in a bucket of water, the reaction would not occur.” Further on (AGRICULTURE, vol. 2, p. 169), the author goes on to say that, “it is seen in alkali deserts that the reaction between salt and limestone (*sic*) does really occur in nature.” This is the strongest statement in the premises that we have been able to find in the literature bearing on the subject. But Storer evidently assumes that *either* caustic lime *or* calcic carbonate may act in the manner specified, and overlooks the indispensable coöperation of carbonic acid. When *that* is present, the reaction *does* occur in the bucket of water, and no porous bodies or dialytic diffusion need be called in; and in the soil, and *a fortiori* in the compost heap, there is no lack of that agent.

A long vista of cases in which this reaction evidently plays a part, opens up before us; and the investigation of its limitations by physical conditions and the presence of other substances involves the possibilities of permutations and combinations enough to form the work of several lifetimes.

In order to gain some insight into the drift and limitations of these, we have made a number of preliminary quantitative experiments with solutions of varied degrees of concentration. Among these, the following, made with potassic sulphate, are the most instructive:

The bulk of solution used was in all cases one liter; in this, precipitated calcic carbonate was kept in suspension by constant agitation, while carbonic gas was being passed into it at a temperature of about 18° C., usually for forty minutes. The first effect was always a slight reddening of the litmus, due to the carbonic acid; but generally this reaction changed to alkaline during the first ten minutes, becoming stronger as time progressed. But comparative experiments showed that nothing was gained in alkalinity by a longer passage of the gas than above indicated.

In each experiment 100 ccm. was decanted immediately after the clear-

ing of the magma and titrated for "total alkalinity," including the calcic carbonate remaining in solution. When an alkaline sulphate was employed, the undissolved carbonate was tested for SO_3 , which in all cases was found to be present.

Another portion of the decanted solution was evaporated to dryness, and the residue weighed as a whole after drying at 110°C. , afterward leached and the filtrate titrated for its alkalinity.

Another portion was mixed with alcohol so as to carry its percentage to about 60 per cent. This caused a gelatinous precipitate, which after twelve hours standing condensed into easily recognizable crystals of gypsum and calcic carbonate. The filtrate from this deposit was also titrated for its alkalinity. The subjoined table summarizes these results:

EXPERIMENTS WITH POTASSIC SULPHATE.

GRAMS PER LITER.	$\frac{1}{2}$	$\frac{1}{2}$	1	2
Evaporation residue 110° degrees, per liter (grams).....	0.837	1.195	1.619	2.735
Residuary alkalinity in same (ccm. Standard H_2SO_4).....	0.35	0.50	0.45	0.75
Total alkalinity of decanted solution.....	9.95	14.10	12.25	14.10
Residuary alkalinity after precipitation with alcohol.....	2.875	5.75	9.70	12.90
Corresponding KHCO_3 (per cent of total possible).....	100	100	83.6	55.6

The table shows that up to one half gram per liter, and beyond to a point not yet ascertained, there is complete decomposition of the potassic sulphate, resulting in the formation of gypsum and potassic bi- (hydro-) carbonate. In a solution containing a gram of the sulphate per liter, only 83.6 per cent of the total possible amount of the carbonate is formed, and in a solution of double that strength (two grams per liter) only 55.6 per cent. But up to that point, and evidently some distance beyond, the *absolute* amount of alkaline carbonate is still on the increase; its ultimate limit remains to be ascertained.

The irregularity of the figures for "total alkalinity" and for the alkalinity of the residue dried at 110° shows that a uniform degree of saturation of the solution with calcic carbonate had not been attained, and that either the temperature of drying the residue was not entirely uniform, or that the composition of the residue influences the alkalinity. But all the evaporation residues were distinctly alkaline, in entire accord with the observations made on natural mineral waters. The alkaline salt causing the reaction is doubtless sesqui-carbonate.

It is hardly necessary to mention that on heating and finally boiling the decanted solution saturated with carbonic gas, the alkalinity promptly decreases; according to what law remains to be ascertained. But even long boiling and evaporation with the calcic carbonate does not again bring about neutrality. This cannot be done by any means short of actual ignition of the mixed mass.

Behavior of Alkali Chlorides.—In the experiments with solutions of alkali sulphates, the long known "tendency to the formation of difficultly soluble compounds" in complex solutions might be called into play. But in the case of the chlorides, the reverse tendency should be manifested; and yet substantially the same reaction occurs. In presence of carbonic acid, alkali carbonates are formed, and chlorides of calcium or magnesium; and the reaction occurs at least as promptly as in the case of sulphates. But our experiments in this direction have thus far been only qualitative,

so that we are not prepared to give any figures in the premises. Nor can we as yet state whether the intensity of the reaction follows the molecular weights of the two alkalis, or is governed by other conditions.

In view of the practical as well as theoretical interest attaching to the subject, we intend to pursue it into its various ramifications as rapidly as time will permit. For the present we present only one instance in which a change now going on on a large scale in nature, is at once explained by even the preliminary experiments reported above.

The three Lakes of the Upper San Joaquin Valley—Kern, Buena Vista, and Tulare—were once connected, and the alkali contained in their waters is manifestly of the same origin. Evaporation has for years past gradually concentrated their waters, for want of the natural influx (Kern River) now diverted by irrigation ditches. But analysis showed that apart from concentration, a change in the *ratio* between the soluble salts has been going on as evaporation progressed. The cause of this change was not obvious.

The table below gives the results of the analyses made in 1880, and one lately made of the water of Tulare Lake, which has likewise been seriously diminished by evaporation so as to more than double its solid contents, shows a difference has occurred corresponding to that which in 1880 existed between Kern and Tulare Lakes. That is, the relative proportions between sodic carbonate on one hand and common and Glauber's salts on the other, have changed, and are tending toward the same ratio that then existed in Kern Lake, evidently as the result of concentration. There has been a relative diminution of the sodic carbonate; in conformity with the rule shown in our experiments, above reported, that as the amount of neutral alkali salts is increased, a relatively smaller amount of carbonate is formed under the influence of CaCO_3 and CO_2 . The calcic carbonate required for the reaction is abundantly present both in the waters and in the deposits of the lake.

TABLE SHOWING THE INCREASE OF ALKALI CARBONATES BY CONCENTRATION.

LOCALITY.	Total Residue.	Carbonate of Soda.	Common and Glauber's Salt.
1880, Tulare Lake, near mouth of Kings River.....	38.55	1	1.11
1880, Tulare Lake, middle.....	81.83	1	1.29
1880, Tulare Lake, south end.....	81.49	1	1.35
1888, Tulare Lake, middle.....	204.00	1	1.58
*1889, Tulare Lake, north end.....	303.07	1	1.94
1880, Kern Lake.....	211.50	1	1.78

Doubtless a host of similar examples can be found within arid regions. We hope before long to communicate additional results.

It may be necessary to remark that while the above table shows no constant ratio between concentration and the proportion of alkali carbonate in solution, the discrepancies are readily accounted for by the possible presence of other conditions that undoubtedly influence the relations between the earthy and alkali carbonates; among these the prevailing temperature, and the relative proportion of lime carbonate in direct contact with the water, are probably the most important factors.

* Added to the table originally given, from the analysis reported above.

Where the lake is shallow, not only will the temperature be higher during the daytime, but the stirring up of the calcareous mud by the wind will give opportunity for action for which the smallness of the "chemical mass" of earthy carbonates in actual solution may not be adequate. Again, in the shallower parts of the lake the green vegetation of cellular plants may materially influence the supply of free carbonic acid, that plays the principal part in these cross-reactions. While, therefore, it remains true, in a general way, that the alkali carbonates decrease with greater concentration, many conditions may arise to make the exact proportions vary quite materially, even within the same sheet of water; as is actually shown to be the case in Tulare Lake by the comparative analyses made of water from different portions of the lake, and samples taken at different depths, as given in the Report of the College of Agriculture for 1880, p. 24.

TWENTY-FIRST ANNUAL REPORT

OF THE

INSURANCE COMMISSIONER

FOR THE

STATE OF CALIFORNIA.

YEAR ENDING DECEMBER 31, 1888.



SACRAMENTO:

STATE OFFICE, : : : : J. D. YOUNG, SUPT. STATE PRINTING.
1889.

TWENTY-FIRST ANNUAL REPORT

OF THE

INSURANCE COMMISSIONER FOR THE STATE OF CALIFORNIA.

INSURANCE DEPARTMENT, }
SAN FRANCISCO, May 31, 1889.

To the honorable R. W. WATERMAN, Governor of California:

SIR: I herewith present the twenty-first annual departmental report, showing generally the condition of the insurance business in this State for the year ending December 31, 1888, in accordance with the requirements of Section 595 of the Political Code.

During the year 1888 the following named companies were admitted to transact business in this State:

Penn Mutual Life.....	Philadelphia.
Manufacturers and Builders Fire.....	New York.
Syndicate.....	Minneapolis.
Germania.....	New Orleans.
Alta Fire (incorporated May 9, 1888).....	Stockton, California.
Long Island.....	Brooklyn.
Exchange Fire	New York.
American	Boston.
General Life and Fire.....	London.
Scania Fire and Life	Malmö, Sweden.
Indemnity Mutual Marine.....	London.
Provident Savings Life.....	New York.

And the following named companies have discontinued doing business in this State:

London and Provincial Fire	London.
Insurance Company of Dakota.....	Sioux Falls.
Merchants	New York.
Howard	New York.
Eliot.....	Boston.
Prescott	Boston.
Fire Insurance Association	London.
Chinese.....	Hong Kong.

The average percentage of losses to premiums on fire risks for 1888 is 50.1.

The average percentage of losses to premiums on marine risks for 1888 is 54.5.

The ratios of losses to premiums on fire risks for the thirteen years next preceding, were:

For the year 1875	28.3
For the year 1876	34.2
For the year 1877	31.0
For the year 1878	26.3
For the year 1879	32.5
For the year 1880	32.5

For the year 1881	33.3
For the year 1882	39.9
For the year 1883	39.1
For the year 1884	28.5
For the year 1885	44.8
For the year 1886	51.2
For the year 1887	37.6

Having ascertained to my satisfaction that the Insurance Company of Dakota was insolvent within the true intent and meaning of Section 600 of the Political Code, I, on the seventh day of September last, revoked its authority to transact business in this State, by notice to the company, and advertisement, as required by said section.

The Alta Fire Company of Stockton was the only insurance company incorporated under the laws of this State during the year 1888.

Eleven companies of other States and countries were admitted, of which eight transact fire, two life, and one marine business.

Eight companies discontinued business, of which seven transacted a fire, and one a marine business.

The total number of companies acting under authority of this department on the thirty-first day of December, 1888, was one hundred and eighty-two, classified as follows:

Fire	104
Fire and Marine	12
Marine	33
Life	22
Life and Accident	2
Accident	1
Surety and Accident	2
Surety	1
Steam boiler	2
Plate glass	2
Title insurance	1
Total	182

The business transacted in this State was as follows:

FIRE INSURANCE.

Amount written	\$352,831,786 00
Premiums on same	6,087,041 48
Losses paid	3,049,030 42
Ratio of losses to premiums	50.1

MARINE INSURANCE.

Amount written	\$134,273,834 00
Premiums on same	1,752,696 58
Losses paid	955,239 49
Ratio of losses to premiums	54.5

LIFE INSURANCE.

Amount written (new policies, 4,216)	\$20,988,358 00
Amount written (renewed policies, 14,582)	49,591,520 00
Total amount written	\$70,579,878 00
Premiums on new policies	\$958,723 17
Premiums on renewed policies	1,880,418 63
Total amount premiums	\$2,839,141 80
Losses and endowments paid	\$1,205,106 91

ACCIDENT INSURANCE.

Amount written	\$37,416,772 00
Premiums on same	120,605 63
Losses paid	34,087 17

SURETY INSURANCE.

Amount written	\$1,382,381 00
Premiums on same	31,361 84
Losses paid	3,930 00

STEAM BOILER INSURANCE.

Amount written	\$1,902,750 00
Premiums on same	26,898 55
Losses paid	641 53

PLATE GLASS INSURANCE.

Amount written	\$308,696 67
Premiums on same	8,881 73
Losses paid	2,838 92

TITLE INSURANCE.

Amount written	\$3,155,901 00
Premiums on same	24,466 75
Losses	None.

Apportioned as follows:

TO COMPANIES OF THIS STATE—FIRE INSURANCE.

Amount written	\$87,446,368 00
Premiums on same	1,472,306 89
Losses paid	666,239 03
Ratio of losses to premiums	45.3

MARINE INSURANCE.

Amount written	\$25,093,798 00
Premiums on same	455,629 51
Losses paid	295,177 05
Ratio of losses to premiums	64.8

TO COMPANIES OF OTHER STATES—FIRE INSURANCE.

Amount written	\$116,408,549 00
Premiums on same	2,114,964 04
Losses paid	1,089,058 80
Ratio of losses to premiums	51.5

MARINE INSURANCE.

Amount written	\$4,119,603 00
Premiums on same	110,144 33
Losses paid	26,043 84
Ratio of losses to premiums	23.6

TO COMPANIES OF FOREIGN COUNTRIES—FIRE INSURANCE.

Amount written	\$148,976,869 00
Premiums on same	2,499,770 55
Losses paid	1,293,732 59
Ratio of losses to premiums	51.8

MARINE INSURANCE.

Amount written	\$105,060,433 00
Premiums on same	1,186,912 74
Losses paid	634,018 60
Ratio of losses to premiums	53.4

TO COMPANIES OF THIS STATE—LIFE INSURANCE.

Amount written	\$5,575,026 00
Premiums on same	275,990 20
Losses and endowments paid	115,371 00

TO COMPANIES OF OTHER STATES.

Amount written	\$65,004,852 00
Premiums on same	2,563,151 60
Losses and endowments paid	1,089,735 91

TO COMPANIES OF THIS STATE—ACCIDENT INSURANCE.

Amount written	\$9,696,250 00
Premiums on same	52,981 39
Losses paid	14,066 77

REPORT OF THE INSURANCE COMMISSIONER.

TO COMPANIES OF OTHER STATES.

Amount written	\$27,118,522 00
Premiums on same	65,038 74
Losses paid	19,807 50

TO COMPANIES OF FOREIGN COUNTRIES.

Amount written	\$602,000 00
Premiums on same	3,585 50
Losses paid	252 90

TO COMPANIES OF THIS STATE—SURETY INSURANCE.

Amount written	\$2,727,245 00
Premiums on same	19,003 28
Losses paid	3,205 46

TO COMPANIES OF OTHER STATES.

Amount written	\$1,655,136 00
Premiums on same	12,358 56
Losses paid	724 54

TO COMPANIES OF OTHER STATES—STEAM BOILER INSURANCE.

Amount written	\$1,902,750 00
Premiums on same	26,898 55
Losses paid	641 53

TO COMPANIES OF OTHER STATES—PLATE GLASS INSURANCE.

Amount written	\$308,696 00
Premiums on same	8,881 73
Losses paid	2,838 92

TO COMPANIES OF THIS STATE—TITLE INSURANCE.

Amount written	\$3,155,901 00
Premiums on same	24,466 75
Losses paid	None.

The details of which will be found in Tables 1 to 8, inclusive. Tables 9 and 10 show the business of the life, accident, surety, plate glass, steam boiler, and title insurance and trust companies.

Table 11 gives the name, location, date of organization, date of certificate of authority, and the officers and agents in California.

Tables 12 to 35, inclusive, show the capital, assets, liabilities, income, expenditures, net surplus, risks written, and risks in force of all the fire and marine companies.

Tables 36 to 41, inclusive, are a recapitulation of Tables 12 to 35, inclusive.

Tables 42 to 45, inclusive, show the assets, liabilities, income, expenditures, and net surplus of the life companies.

Table 46 shows the number and amount of policies of life companies in force at the close of the previous year; also an exhibit of the policies issued, of those which have ceased to be in force, and those in force on the thirty-first day of December, 1888.

Table 47 shows the number and amount of policies of life companies which have ceased to be in force during the year, with the mode of their termination.

Table 48 gives the amounts collected from the different companies for fees, taxes, etc.

FIRE INSURANCE.

The fire risks written in 1888 exceed those written in 1887	\$24,920,834 00
The premiums received in 1888 exceed those in 1887	\$496,687 59
The losses in 1888 exceed those in 1887	\$947,547 90
The fire risks in force December 31, 1888, exceed those in force December 31, 1887	\$39,359,494 00
The premiums on fire risks in force December 31, 1888, exceed those in force December 31, 1887	\$681,507 19
The percentage of losses to premiums of 1888 exceeds that of 1887 by 12.5 per cent.	

MARINE INSURANCE.

The marine risks written in 1888 exceed those written in 1887.....	\$12,616,805 00
The premiums received in 1888 exceed those in 1887	\$253,531 13
The losses in 1888 exceed those in 1887	\$141,297 80
The marine risks in force December 31, 1888, exceed those in force December 31, 1887	\$10,014,401 00
The premiums on marine risks in force December 31, 1888, exceed those in force December 31, 1887	\$176,022 83
The percentage of losses to premiums of 1888 exceeds that of 1887 by two tenths of one per cent.	

LIFE INSURANCE.

The amount of insurance on new policies written in 1888 exceeds that written in 1887.....	\$9,162,652 00
The premiums received for new policies written in 1888 exceed those in 1887..	\$443,390 72
The amount of insurance on policies renewed in 1888 exceeds that in 1887..	\$8,652,058 00
The premiums received for policies renewed in 1888 exceed those in 1887 ...	\$322,547 43
The losses and endowments paid in 1888 exceed the amount paid in 1887 ...	\$154,051 80
The amount of insurance in force December 31, 1888, exceeds that in force December 31, 1887	\$13,131,673 00
The number of new policies written in 1888 exceed those written in 1887 by	1,002
The policies renewed in 1888 exceed those renewed in 1887 by	2,194
The number of policies in force December 31, 1888, exceed those in force December 31, 1887	2,029

ACCIDENT, FIDELITY, STEAM BOILER, PLATE GLASS, AND TITLE INSURANCE.

As two companies transact more than one class of business named above, and as until this year their business was not segregated in their statements made to this office (I having given them notice that such segregation must be made in future), I am unable to make a separate comparison of each business with that of the preceding year, as has been done with the fire, marine, and life companies. I therefore give the figures collectively:

The amount of insurance on new policies written in 1888 exceeds that written in 1887	\$13,405,699 45
The premiums received for new policies written in 1888 exceed those in 1887..	\$38,331 81
The amount of insurance on policies renewed in 1888 exceeds that in 1887..	\$1,218,762 20
The premiums received for policies renewed in 1888 exceed those in 1887....	\$5,960 58
The losses paid in 1888 exceed the amount paid in 1887.....	\$7,212 18
The amount of insurance in force December 31, 1888, exceeds that of December 31, 1887	\$6,655,035 90
The number of new policies written in 1888 exceed those written in 1887....	4,642
The policies renewed in 1888 were less than those renewed in 1887	39
The number of policies in force December 31, 1888, exceed those in force December 31, 1887	796

EXAMINATION OF COMPANIES.

I made the annual examination of the local companies immediately after their statements were filed, and found their business prudently conducted, and their capital and accumulations invested in such securities as the Code designates.

The statements of the companies of other States and foreign countries were carefully examined and found satisfactory and in accordance with the requirements of the insurance laws.

UNAUTHORIZED INSURANCE.

In the month of June last, having ascertained that certain parties were engaged in soliciting insurance in this State, without authority from this department, for a company calling itself "The Northwestern Insurance Company of Wahpeton, Dakota," I caused to be published in San Francisco, Los Angeles, and Sacramento daily newspapers the following notice:

NOTICE TO THE PUBLIC.

OFFICE OF INSURANCE COMMISSIONER OF THE STATE OF CALIFORNIA, }
 SAN FRANCISCO, June 28, 1888. }

To all whom it may concern:

Satisfactory evidence having been furnished me that a company calling itself the Northwestern Insurance Company of Wahpeton, Dakota, is soliciting insurance in this State, I hereby give notice that said insurance company is not authorized to transact business in this State, and any one soliciting business for it is liable to prosecution, under the law. From the information furnished me, I am satisfied this company is fraudulent, and has no intention of paying any loss that might occur under its policies, and advise all persons to be on their guard against W. G. Whitcomb and Frank McGuire, who have been soliciting business and issuing policies for the said company, but cannot now be found by this department.

J. C. L. WADSWORTH,
 Insurance Commissioner.

This effectually put a stop to the business. The parties engaged in it left for parts unknown, and have not been heard from since.

During the year 1888 it came to the knowledge of this office that the firm of Johnson & Higgins, eastern insurance brokers, were engaged in procuring for citizens of this State marine insurances in companies not authorized to do business here, and that such business was carried on through one R. B. Hooper, acting as the agent of the firm. Much difficulty was experienced in procuring proof of specific cases, as the parties for whom these insurances were obtained were loath to give the information upon which a criminal prosecution against Mr. Hooper could be based. But I finally procured such information, and after consultation with the Attorney-General, I caused Mr. Hooper to be arrested on the twenty-ninth day of September, upon a complaint filed in the Police Judge's Court of San Francisco, charging him with misdemeanor in procuring insurance for a resident of this State, in violation of Section 439 of the Penal Code. Messrs. Van Ness & Roche were authorized by the Attorney-General to prosecute the case upon behalf of the State, and upon the trial of Hooper in the Police Court procured a conviction. An appeal was taken by the defendant, Hooper, to the Superior Court of the City and County of San Francisco. The matter was there fully argued, and the result was the affirmation of the judgment of the lower Court. Mr. Hooper's attorneys have taken steps to carry the matter to the Supreme Court of the United States, where the constitutionality of the California statute will ultimately be determined.

On the twenty-sixth day of October last, I caused a complaint to be filed against R. P. Thomas, President, and D. F. Leahy, Secretary of the Fire Relief Association of California (which had been organized without any capital stock for the purpose of transacting a fire insurance business upon the assessment plan), for issuing, in the month of September previous, a policy of fire insurance without authority of this department, as provided in Section 596 of the Political Code. Mr. T. C. Coogan is acting as attorney for the State by authority of the Attorney-General. Judgment was rendered in the lower Court in favor of the State and the case was appealed to the Supreme Court. The action has been argued and submitted, and the decision is expected soon.

At Los Angeles, on the twenty-sixth day of December last, I caused the arrest of M. Whaling for procuring fire insurance for the Pierre Fire and Marine Insurance Company of Pierre, Dakota, in violation of Section 439 of the Penal Code, said company not being authorized to transact business in this State. Mr. Whaling acknowledged that he had procured such insurance, and upon his promise to the District Attorney of Los Angeles County and myself that he would at once cancel all policies obtained by

him, refrain from doing any more business of this nature in future, and pay all costs of the proceedings, I authorized the dismissal of the suit.

LEGISLATION.

Of the large number of bills affecting insurance introduced at the recent session of the Legislature, the only one that became a law was one prepared by myself amending Section 447 of the Civil Code, relating to the valuation of policies of life insurance, whereby the rate of interest was changed from four and one half per cent to four per cent per annum, based upon the rate of mortality established by the Combined Experience or Actuaries' Table, to take effect from and after the thirty-first day of December, 1891. This will make a rate of valuation uniform with nearly all the other States, and increase the security of the policy holders, as the companies will be obliged to hold a larger amount in reserve.

I also prepared and had introduced a bill entitled "An Act relating to life and casualty and annuity or endowment insurance on the assessment plan, and the conduct of the business of such insurance." The object of the bill was to subject assessment companies to the same authority which this department exercises over the other forms of insurance. The passage of this bill would have enabled the Insurance Department to protect the people of this State from the fraudulent insurance schemes of mere adventurers. All the reputable assessment or coöperative companies operating in this State favored the proposed law, and several gave the bill their active support; but the more numerous disreputable assessment companies succeeded in defeating it.

The opposition came mainly from the thirty so called endowment associations, which, under the proposed law, would have had few or no opportunities for the practice of the gross deceptions by which they thrive at the expense of ignorant people. Two of these mushroom endowment associations which bitterly fought any legislation designed to curtail their opportunities to defraud their members, have since failed, leaving nothing but a bad name and many dupes with claims which never will be paid.

When my bill was before the Legislature, representatives of these endowment associations swarmed the lobbies, and covered the desks of legislators with printed protests, appeals, and ingenious misrepresentations. It was such opposition that defeated the bill. I can not hope, therefore, that it would be of any use to reiterate the reasons I have advanced in former reports in behalf of much needed assessment legislation similar to that of the Eastern States. Some day, perhaps, without any urging from this department, the Legislature will impose wholesome restraints upon these swindling assessment insurance schemes which now with impunity filch the savings of the toilers, and defraud helpless widows and orphans.

The result attending the amendment of Section 617 of the Political Code, by the Legislature of 1887, whereby the penalty for failure to file the annual statements of the companies within the time prescribed by law was reduced from \$1,000 for the first month's failure, and \$2,000 for each and every month thereafter, to \$100 for the first month and \$200 for each succeeding month until filed, realized my anticipations by the promptness in which the statements were subsequently filed, and the penalty when delinquent was paid. The original penalty was so large that no attempt had ever been made to enforce its payment, in consequence of which the law had come to be considered a "dead letter." Many statements were not received in time, thereby delaying the compilation of the annual report. Last year only ten statements were behind time, for which the penalty was

promptly paid, adding \$1,000 to the revenue of the State. This year only six statements are delinquent.

I am not aware of any business that is called upon to defend and protect itself against inimical legislation to the same extent as the insurance business. Whenever the Legislature meets, numerous bills are introduced tending to hamper and annoy the underwriting interests. Many of them are gotten up by men having but little knowledge of the principles of insurance, for personal ends, or to cater to popular clamor.

"In the Legislature of one of the Eastern States, at its last session, more than forty bills were introduced for various forms of insurance legislation. A member remarked that he did not so much care which of these bills passed, but something must be done to appease the popular clamor."

The public should be protected from irresponsible companies, and all companies should be so looked after by the State officials having charge of the insurance departments, that no doubt could be entertained of their responsibility. No other business is subject to the same surveillance, or has had placed around it by the State as many safeguards for the people's protection. All companies are obliged to make annually a sworn statement of their entire business and condition, which is open at all times to public inspection and which the law compels them to have published in the daily newspapers. They are subject to examination at any moment the Commissioner may choose to make one, and are obliged (under a heavy penalty in case of refusal) to give full and true information in writing, in answer to any inquiry in writing by the Commissioner relating to the business of insurance as carried on by them.

The vast interests which may be injuriously affected by hasty fire insurance legislation may be conceived from the fact that over fourteen billion dollars of risks are in force in the United States. This sum is almost beyond comprehension. The average profit is less than 5 per cent of the premium income. The extent of these interests and the narrow margin of profit for the great risks assumed by capital, suggest cautious deliberation in fire insurance legislation.

RECEIPTS—1888.

Received for fees and taxes.....	\$28,928 60
----------------------------------	-------------

EXPENDITURES—1888.

Office salaries	\$4,800 00
Office rent.....	600 00
Janitor.....	360 00
Advertising	98 60
Stationery.....	82 20
Newspapers.....	39 45
Fuel.....	35 50
Incidentals, postage stamps, expressage, etc.	125 90
	6,141 65

Balance in State Treasury.....	\$22,786 95
--------------------------------	-------------

The amount of money received for fees, taxes, etc., since the organization of this department in 1868, to January 1, 1889, is	\$297,586 43
The total expenditure for the same time, including salaries, have been.....	157,264 61

Net revenue to the State	\$140,321 82
--------------------------------	--------------

I again take pleasure in recording my acknowledgments to Mr. M. M. Rhorer, Deputy Commissioner, for his able and efficient conduct of the business of his office.

All of which is respectfully submitted.

J. C. L. WADSWORTH,
Insurance Commissioner.

TABLE No. 1.

Showing the business of California Insurance Companies for the year 1888—California business.

NAME.	Location.	FIRE.			
		Risks Written.	Premiums on same.	Losses Paid.	Ratio of Losses to Premiums.
Alta Fire	Stockton	\$1,989,092 00	\$35,887 90	\$5,517 62	15.4
Anglo-Nevada	San Francisco	12,625,863 00	221,380 32	94,832 27	42.8
California	San Francisco	6,950,010 00	111,788 66	35,327 31	31.6
Commercial	San Francisco	3,664,648 00	62,140 01	20,883 08	33.6
Fireman's Fund	San Francisco	14,690,061 00	243,406 31	123,391 49	50.7
Home Mutual	San Francisco	13,156,153 00	232,468 11	128,249 12	55.2
Oakland Home	Oakland	8,903,941 00	136,636 30	62,814 23	45.9
Southern California	Los Angeles	5,082,610 00	95,596 74	36,424 49	38.1
State Investment	San Francisco	8,379,021 00	136,394 12	84,661 72	62.1
Union	San Francisco	4,714,093 00	79,224 99	35,847 80	45.2
Union	San Francisco	7,280,876 00	117,383 43	38,289 90	32.6
Totals .....	.....	\$87,446,368 00	\$1,472,306 89	\$666,239 03	45.3

TABLE No. 1—Continued.

NAME.	Location.	MARINE.			
		Marine and Inland.		Marine Time.	
		Risks Written.	Premiums on same.	Risks Written.	Premiums on same.
Alta Fire	Stockton	\$6,694,673 00	\$46,714 28	\$338,707 00	\$16,643 01
Anglo-Nevada	San Francisco	1,591,765 00	19,889 96	558,968 00	36,603 86
California	San Francisco	411,153 00	4,537 93	149,123 00	12,096 50
Commercial	San Francisco	4,342,941 00	46,637 88	1,244,838 00	90,535 24
Fireman's Fund	San Francisco				
Home Mutual	Oakland				
Oakland Home	Los Angeles				
Southern California	San Francisco				
State Investment	San Francisco	2,094,531 00	21,015 30	952,687 00	68,532 45
Union	San Francisco	6,082,852 00	45,495 49	631,500 00	46,927 61
Totals		\$21,217,915 00	\$184,290 84	\$3,875,883 00	\$271,338 67
NAME.	Location.	MARINE.			
		Total Premiums on same.		Ratio of Losses to Premiums.	
		Total Risks Written.	Losses Paid.		
Alta Fire	Stockton	\$7,033,380 00	\$73,457 19		115.9
Anglo-Nevada	San Francisco	2,150,733 00	33,125 47		58.8
California	San Francisco	560,276 00	15,921 86		95.7
Commercial	San Francisco	5,887,779 00	58,768 83		42.8
Fireman's Fund	San Francisco				
Home Mutual	Oakland				
Oakland Home	Los Angeles				
Southern California	San Francisco				
State Investment	San Francisco	3,047,218 00	58,172 82		64.9
Union	San Francisco	6,714,412 00	55,735 88		60.3
Totals		\$25,093,798 00	\$295,177 05		64.8

TABLE No. 2.

Showing the Amount and Description of Risks in Force December 31, 1883, of California Insurance Companies—California business.

NAME.	Location.	FIRE.		MARINE AND INLAND.	
		Risks.	Premiums.	Risks.	Premiums.
Alta Fire.....	Stockton.....	\$1,468,881 00	\$28,639 70	---	---
Anglo-Nevada.....	San Francisco.....	14,795,181 00	233,637 16	\$271,448 00	\$6,282 98
California.....	San Francisco.....	9,248,521 00	151,702 34	230,651 00	4,103 32
Commercial.....	San Francisco.....	3,332,314 00	55,969 96	179,247 00	2,575 37
Fireman's Fund.....	San Francisco.....	18,814,228 00	293,776 35	304,039 00	6,337 84
Home Mutual.....	San Francisco.....	20,520,753 00	347,226 75	---	---
Oakland Home.....	Oakland.....	9,376,360 00	146,371 46	---	---
Southern California.....	Los Angeles.....	6,606,207 00	115,400 27	---	---
State Investment.....	San Francisco.....	8,482,375 00	138,362 71	---	---
Sun.....	San Francisco.....	6,045,985 00	98,272 75	233,311 00	3,696 26
Union.....	San Francisco.....	9,164,937 00	150,396 68	362,724 00	5,736 37
Totals.....	---	\$107,855,742 00	\$1,759,816 13	\$1,581,420 00	\$28,732 14
NAME.	Location.	MARINE TIME.		TOTALS.	
		Risks.	Premiums.	Risks.	Premiums.
Alta Fire.....	Stockton.....	---	---	\$1,468,881 00	\$28,639 70
Anglo-Nevada.....	San Francisco.....	\$347,457 00	\$8,000 41	15,414,086 00	247,980 55
California.....	San Francisco.....	461,243 00	35,336 86	9,940,415 00	191,142 52
Commercial.....	San Francisco.....	115,192 00	9,277 35	3,626,763 00	67,822 68
Fireman's Fund.....	San Francisco.....	988,163 00	83,258 53	20,106,430 00	383,372 72
Home Mutual.....	San Francisco.....	---	---	20,520,753 00	347,226 75
Oakland Home.....	Oakland.....	---	---	20,520,753 00	347,226 75
Southern California.....	Los Angeles.....	---	---	9,376,360 00	146,371 46
State Investment.....	San Francisco.....	---	---	6,606,207 00	115,400 27
Sun.....	San Francisco.....	920,893 00	68,461 88	8,482,375 00	138,362 71
Union.....	San Francisco.....	574,210 00	43,444 21	7,200,189 00	170,430 89
Totals.....	---	\$3,407,158 00	\$247,839 24	\$112,844,320 00	\$2,036,387 51

TABLE No. 3.

Showing the Fire business of Companies of other States, for the year 1888.—California business.

NAME.	Location.	Amount Written.	Premiums on same.	Losses Paid.	Ratio of Losses to Premiums.
Æthna	Hartford	\$9,207,953 00	\$150,006 80	\$80,738 55	53.8
Agricultural	Watertown, N. Y.	2,491,003 00	34,900 44	9,355 37	26.8
Amazon	Cincinnati	777,739 00	18,556 06	19,085 77	102.8
American	Newark	1,595,257 00	28,407 47	10,120 86	35.4
American	Doston	197,417 00	3,715 13	1,250 00	33.7
American Central	St. Louis	1,729,610 00	28,675 51	12,843 19	44.8
American Fire	Philadelphia	2,102,300 00	52,921 15	31,843 38	60.2
American Fire	New York	1,259,701 00	25,515 30	7,945 62	31.1
Baylston	Boston	542,402 00	8,498 29	3,374 83	39.1
Citizens	St. Louis	216,034 00	4,238 72	476 99	11.2
Citizens	New York	1,848,201 00	24,178 06	9,287 33	38.4
Citizens	Cincinnati	518,784 00	15,192 65	10,138 98	66.7
Concordia	Milwaukee	754,764 00	13,623 26	4,320 00	31.7
Connecticut Fire	Hartford	3,347,905 00	59,615 15	40,981 94	68.8
Continental	New York	2,223,082 00	38,489 00	20,516 81	53.3
Eliot	Boston	110,497 00	4,882 50	2,371 06	48.5
Exchange	New York	147,810 00	2,455 00	1,000 00	40.8
Farragut Fire	New York	101,126 00	1,847 68	765 00	41.3
Fire Association of Philadelphia	Philadelphia	1,653,915 00	30,677 38	12,511 78	40.8
Firemen's	Baltimore	397,917 00	9,709 32	5,998 01	61.8
Firemen's	Newark	924,611 00	19,866 41	11,846 89	59.6
Franklin Fire	Philadelphia	1,196,889 00	19,682 46	8,225 38	41.8
German	Freeport, Ill.	1,799,249 00	32,544 13	12,685 50	38.9
German-American	New York	3,463,512 00	67,336 69	41,626 06	61.7
Germania	New Orleans	246,245 00	5,705 66	1,119 81	19.1
Germania Fire	New York	2,243,132 00	37,366 00	26,383 40	70.6
Giard Fire and Marine	Philadelphia	588,386 00	10,421 11	8,920 93	85.6
Glen's Falls	Glen's Falls, N. Y.	1,394,494 00	25,236 20	12,778 00	50.6
Granite State Fire	Portsmouth, N. H.	529,881 00	12,155 08	2,548 70	20.9
Hanover	New York	3,696,402 00	48,386 12	18,574 66	38.4
Hartford Fire	Hartford	10,257,290 00	157,893 56	58,545 96	37.1
Home	New York	5,336,907 00	87,836 29	38,330 29	43.6
Howard	New York	1,199,698 00	22,430 19	5,872 25	26.1
Insurance Company of North America	Philadelphia	5,585,676 00	87,297 90	49,100 08	56.2
Insurance Company of the State of Pennsylvania	Philadelphia	870,419 00	16,153 36	6,692 11	41.4
Liberty	New York	860,832 00	17,771 06	7,112 35	40.6

Long Island.....	Brooklyn.....	381,986 00	7,464 96	3,487 32	46.6
Manufacturers and Builders.....	New York.....	402,967 00	7,736 28	3,209 70	41.5
Mechanics and Traders.....	New Orleans.....	364,777 00	5,827 47	5,460 90	93.7
Merchants.....	Newark.....	1,204,723 00	23,590 17	7,110 50	30.1
Michigan Fire and Marine.....	Detroit.....	798,293 00	12,739 81	3,977 72	31.2
National Fire.....	New York.....	1,557,401 00	31,970 63	19,052 60	59.6
National Fire.....	Hartford.....	1,772,110 00	37,488 69	36,324 27	96.9
New Hampshire Fire.....	Manchester.....	845,971 00	17,363 58	5,636 73	32.5
Niagara Fire.....	New York.....	2,625,615 00	41,030 09	27,280 93	66.5
North American.....	Boston.....	409,126 00	8,499 14	6,117 45	71.9
Oregon Fire and Marine.....	Portland.....	503,152 00	14,323 10	9,387 45	65.5
Orient.....	Hartford.....	2,145,349 00	36,834 27	31,622 63	85.5
Pacific Fire.....	New York.....	443,127 00	7,613 83	4,343 10	57.0
Pennsylvania Fire.....	Philadelphia.....	2,017,426 00	44,299 92	34,888 78	78.8
People's Fire.....	Manchester, N. H.....	625,046 00	10,045 84	10,715 00	106.6
Phoenix.....	New York.....	7,900,116 00	198,805 67	83,977 31	42.2
Phoenix.....	Hartford.....	5,200,582 00	85,353 47	37,850 74	44.3
Prescott.....	Boston.....	110,497 00	4,882 50	2,371 06	48.5
Providence-Washington.....	Providence, R. I.....	996,498 00	20,688 72	8,810 41	42.6
Security.....	New Haven.....	837,327 00	18,492 94	8,451 45	45.6
Southern.....	New Orleans.....	828,151 00	22,915 83	19,405 69	84.7
Springfield Fire and Marine.....	Springfield, Mass.....	4,911,002 00	88,524 60	45,893 70	51.8
St. Paul.....	St. Paul, Minn.....	861,837 00	17,551 53	14,555 94	82.9
Sun Mutual.....	New Orleans.....	733,607 00	17,294 48	14,705 88	85.0
Syndicate.....	Minneapolis.....	347,204 00	7,543 84	6,640 00	88.0
Teutonia.....	New Orleans.....	337,430 00	5,308 60	4,225 33	79.6
Traders.....	Chicago.....	927,391 00	17,561 92	5,722 49	32.6
Union.....	Philadelphia.....	780,205 00	14,350 25	4,784 00	33.3
United States Fire.....	New York.....	346,436 00	5,944 69	2,680 37	45.1
Westchester Fire.....	New York.....	2,105,302 00	38,181 05	16,770 05	43.9
Williamsburg City Fire.....	Brooklyn.....	1,221,634 00	20,319 08	8,301 41	40.8
Totals.....		\$116,408,549 00	\$2,114,964 04	\$1,089,058 80	51.5

TABLE NO. 4.

Showing the Fire Risks in Force in California on December 31, 1888—Companies of other States.

NAME.	Location.	Risks.	Premiums.
Etna	Hartford	\$11,508,741 00	\$196,466 70
Agricultural	Watertown, N. Y.	3,537,486 00	49,939 10
Amazon	Cincinnati	953,732 00	20,483 79
American	Newark	2,084,779 00	34,464 23
American	Boston	188,547 00	3,529 38
American Central	St. Louis	2,786,965 00	42,735 47
American Fire	Philadelphia	2,397,538 00	55,138 24
American Fire	New York	1,328,851 00	25,519 50
Boylston	Boston	632,313 00	9,863 88
Citizens	St. Louis	256,393 00	4,474 15
Citizens	New York	1,836,687 00	28,872 13
Citizens	Cincinnati	594,699 00	14,551 15
Concordia	Milwaukee	697,242 00	12,556 00
Connecticut Fire	Hartford	4,351,669 00	77,459 70
Continental	New York	2,917,438 00	47,352 96
Eliot	Boston		
Exchange	New York	145,810 00	2,294 00
Farragut Fire	New York	124,376 00	1,979 95
Fire Association of Philadelphia	Philadelphia	2,116,000 00	37,000 00
Firemen's	Baltimore	545,514 00	11,676 13
Firemen's	Newark	985,784 00	20,001 01
Franklin Fire	Philadelphia	1,256,733 00	20,881 00
German	Freeport, Ill.	1,643,150 00	29,857 75
German-American	New York	4,484,712 00	79,288 72
Germania	New Orleans	231,624 00	5,098 62
Germania Fire	New York	2,847,494 00	45,695 90
Girard Fire and Marine	Philadelphia	642,107 00	10,824 08
Glen's Falls	Glen's Falls, N. Y.	1,264,047 00	22,955 30
Granite State Fire	Portsmouth, N. H.	498,000 00	11,000 00
Hanover	New York	3,673,375 00	57,744 28
Hartford Fire	Hartford	12,499,881 00	203,049 74
Home	New York	6,796,853 00	121,517 72
Howard	New York	1,105,692 00	20,162 50
Insurance Company of North America	Philadelphia	6,806,718 00	110,969 96
Insurance Co. of the State of Penn.	Philadelphia	792,267 00	15,210 51
Liberty	New York	1,071,507 00	18,283 27
Long Island	Brooklyn	374,040 00	7,423 88
Manufacturers and Builders	New York	375,817 00	7,526 65
Mechanics and Traders	New Orleans	386,202 00	6,014 37
Merchants	Newark	1,154,623 00	20,969 29
Michigan Fire and Marine	Detroit	750,132 00	12,620 39
National Fire	New York	1,758,230 00	35,170 70
National Fire	Hartford	1,715,357 00	36,478 13
New Hampshire Fire	Manchester	827,098 00	16,778 00
Niagara Fire	New York	2,348,368 00	45,880 31
North American	Boston	429,582 00	8,923 00
Oregon Fire and Marine	Portland	530,931 00	13,184 50
Orient	Hartford	2,060,722 00	35,676 12
Pacific Fire	New York	669,049 00	10,678 18
Pennsylvania Fire	Philadelphia	2,011,679 00	45,773 33
People's Fire	Manchester, N. H.	420,917 00	8,261 69
Phenix	New York	16,619,550 00	524,637 05
Phenix	Hartford	6,649,535 00	118,916 53
Prescott	Boston		
Providence-Washington	Providence, R. I.	1,049,407 00	21,297 33
Security	New Haven	909,102 00	19,073 10
Southern	New Orleans	849,020 00	21,825 04
Springfield Fire and Marine	Springfield, Mass.	4,403,692 00	79,967 15
St. Paul	St. Paul, Minn.	955,844 00	19,063 08
Sun Mutual	New Orleans	745,676 00	16,162 11
Syndicate	Minneapolis	309,618 00	6,620 24
Teutonia	New Orleans	308,689 00	5,422 41
Traders	Chicago	933,491 00	15,643 24
Union	Philadelphia	693,162 00	12,588 90
United States Fire	New York	331,610 00	5,631 50
Westchester Fire	New York	3,069,544 00	55,381 30
Williamsburg City Fire	Brooklyn	1,343,797 00	22,350 00
Totals		\$140,589,208 00	\$2,724,839 39

TABLE No. 5.

Showing the Fire business of Companies of Foreign Countries for the year 1888—California business.

NAME.	Location.	Amount Written.	Premiums on same.	Losses Paid.	Ratio of Losses to Premiums.
Atlas	London	\$2,638,858 00	\$47,844 66	\$29,277 34	61.2
British America	Toronto	2,038,897 00	27,374 46	14,004 25	51.2
Caledonia	Edinburgh	3,115,895 00	53,580 89	22,140 79	41.3
City of London Fire	London	3,357,901 00	65,665 33	24,860 82	37.8
Commercial Union	London	10,373,366 00	181,084 45	113,610 35	62.7
Economic Fire	London	451,902 00	9,828 85	4,164 80	42.4
Fire Insurance Association	London	2,025,230 00	37,783 22	15,971 00	42.3
General Life and Fire	London	353,200 00	5,053 60	None.	-----
Guardian Fire and Life	London	7,559,535 00	118,098 82	55,119 77	46.6
Hamburg-Bremen	Hamburg	6,444,318 00	96,613 84	56,296 87	58.3
Hamburg-Magdeburg	Hamburg	2,794,316 00	47,338 80	20,932 25	44.2
Helvetia-Swiss Fire	St. Gall, Switzerland	6,476,807 00	90,281 54	14,990 31	16.6
Imperial Fire	London	2,871,675 00	55,389 30	48,048 58	87.9
Lancashire	Manchester	3,055,110 00	51,617 97	25,772 90	49.1
Lion Fire	London	3,512,309 00	69,099 25	67,214 13	97.3
Liverpool and London and Globe	Liverpool	19,333,177 00	277,444 73	124,232 88	44.8
London	London	3,218,590 00	49,888 04	27,087 42	54.3
London and Lancashire	Liverpool	4,683,514 00	104,955 09	61,007 15	58.1
Magdeburg Fire	Magdeburg	1,041,438 00	19,279 10	11,806 10	61.3
Manchester Fire	Manchester	3,721,702 00	68,089 25	45,244 81	66.5
National	Dublin	3,132,540 00	54,929 95	29,566 83	53.8
New Zealand	Auckland	6,807,827 00	102,121 88	28,938 89	28.3
North British and Mercantile	London	5,173,394 00	91,278 57	50,290 07	55.1
North German Fire	Hamburg	4,705,910 00	81,394 86	32,184 79	39.5
Northern	London	3,218,590 00	49,888 04	27,087 42	54.3
Norwich Union	Norwich, England	3,055,110 00	51,617 97	25,772 90	49.1
Phoenix	London	5,358,321 00	90,472 95	44,762 07	49.5
Prussian National	Stettin	3,651,342 00	71,060 91	31,489 75	44.3
Queen	Liverpool	3,218,590 00	49,888 04	27,087 42	54.3
Royal	Liverpool	3,055,110 00	51,617 97	25,772 90	49.1
Scania	Malmö, Sweden	143,477 00	3,412 97	None.	-----
Scottish Union and National	Edinburgh	3,056,483 00	50,819 02	24,055 87	47.3
South British Fire and Marine	Auckland	2,996,852 00	46,304 40	45,579 59	98.4
Straits Fire	Singapore	426,870 00	9,696 74	5,473 15	56.5
Sun Fire	London	2,680,350 00	48,594 57	20,847 76	42.9
Svea	Gothenburg, Sweden	2,094,043 00	32,081 40	17,813 68	55.5

TABLE No. 5—Continued.

NAME.	Location.	Amount Written.	Premiums on same.	Losses Paid.	Ratio of Losses to Premiums.
Transatlantic Fire.....	Hamburg.....	\$2,331,480 00	\$12,512 04	\$26,912 61	63.3
Union Fire and Marine.....	Christchurch, New Zealand.....	1,971,122 00	37,851 02	11,195 77	29.5
United Fire.....	Manchester.....	642,838 00	14,771 39	15,904 30	107.7
Western.....	Toronto.....	2,008,980 00	43,144 58	20,614 30	47.7
Totals.....	-----	\$148,976,869 00	\$2,499,770 55	\$1,293,732 59	51.8

TABLE No. 6.

Showing Fire Risks in Force on December 31, 1888—Companies of Foreign Countries—California business.

NAME.	Location.	Risks.	Premiums.
Atlas	London	\$3,074,178 00	\$56,434 33
British America	Toronto	1,959,845 00	28,326 53
Caledonian	Edinburgh	3,239,986 00	58,966 88
City of London Fire	London	3,528,009 00	65,325 32
Commercial Union	London	8,921,094 00	155,732 24
Economic Fire	London	495,126 00	10,287 43
Fire Insurance Association	London	1,852,917 00	33,635 20
General Life and Fire	London	353,200 00	5,053 60
Guardian Fire and Life	London	9,365,083 00	141,704 45
Hamburg-Bremen	Hamburg	6,860,842 00	117,172 19
Hamburg-Magdeburg	Hamburg	3,332,807 00	54,501 50
Helvetia Swiss Fire	St. Gall, Switzerland	6,679,712 00	99,457 10
Imperial Fire	London	2,708,666 00	52,573 89
Lancashire	Manchester	3,552,977 00	58,023 43
Lion Fire	London	3,420,680 00	67,786 30
Liverpool and London and Globe	Liverpool	24,190,980 00	376,867 12
London	London	4,082,845 00	69,816 64
London and Lancashire	Liverpool	5,765,228 00	100,442 57
Magdeburg Fire	Magdeburg	1,264,977 00	22,121 60
Manchester Fire	Manchester	4,152,477 00	75,387 36
National	Dublin	3,560,113 00	62,301 75
New Zealand	Auckland	7,545,385 00	113,184 60
North British and Mercantile	London	6,776,350 00	114,262 63
North German Fire	Hamburg	5,689,935 00	97,303 85
Northern	London	4,082,845 00	69,816 64
Norwich Union	Norwich, England	3,552,977 00	58,023 43
Phoenix	London	6,011,732 00	107,650 80
Prussian National	Stettin	4,149,745 00	77,029 85
Queen	Liverpool	4,082,845 00	69,816 64
Royal	Liverpool	3,552,977 00	58,023 43
Scania	Malmö, Sweden	143,477 00	3,412 97
Scottish Union and National	Edinburgh	3,230,413 00	55,086 16
South British Fire and Marine	Auckland	2,697,552 00	43,099 03
Straits Fire	Singapore	567,515 00	10,141 19
Sun Fire	London	3,693,930 00	57,049 12
Svea	Gothenburg, Sweden	2,127,269 00	32,779 89
Transatlantic Fire	Hamburg	2,449,880 00	46,589 29
Union Fire and Marine	Christchurch, N. Z.	2,343,219 00	42,696 27
United Fire	Manchester	840,630 00	16,918 11
Western	Toronto	2,425,412 00	44,958 85
Totals .....	.....	\$168,325,830 00	\$2,829,820 08

TABLE No. 7.
Showing the business of Marine Companies for the year 1888—California business.

NAME.	Location.	Amount Written.	Premiums on same.	Losses Paid.	Ratio of Losses to Premiums.
Alliance Marine	London	\$588,621 00	\$10,431 00	\$145 50	1.4
Australian General	Sydney	230,277 00	3,341 06	3,000 00	89.7
Batavia	Basle, Switzerland	2,132,766 00	27,562 75	17,317 00	62.8
Boston Marine	Boston	978,164 00	32,317 14	540 81	1.7
British and Foreign Marine	Liverpool	8,663,320 00	96,432 91	61,403 45	63.7
Canton	Hong Kong	7,094,162 00	77,750 84	40,126 88	51.6
China Traders	Hong Kong	1,597,386 00	6,141 52	None.	
Commercial Union	London	5,546,418 00	56,111 41	18,956 89	33.8
Ponciere	Paris	5,550,704 00	45,947 16	39,333 77	86.5
Franco-Hungarian	Buda-Pesth	2,293,044 00	37,208 40	9,999 50	26.9
Globe Marine	London	41,000 00	534 09	None.	
Helvetia General	St. Gall, Switzerland	2,132,766 00	27,562 75	17,317 00	62.8
Indemnity Mutual Marine	London	388,623 00	4,601 54	None.	
Insurance Company of North America	Philadelphia	1,686,725 00	41,928 82	15,402 49	36.7
International Marine	Liverpool	113,881 00	2,342 97	3,318 47	141.7
London	London	1,789,282 00	24,242 93	7 13	.63
London and Provincial Marine	London	1,448,328 00	12,228 19	4,206 71	34.4
Magdeburg General	Magdeburg	3,911,554 00	44,955 05	22,310 90	49.6
Mannheim	Mannheim	205,643 00	1,774 73	None.	
Man On	Hong Kong	1,525,606 00	8,783 99	8,975 19	102.0
Marine	London	235,542 00	3,321 04	3,577 52	107.7
Maritime	Liverpool	796,783 00	11,152 39	4,226 53	37.9
National Marine	London	569,751 00	6,890 70	926 40	13.4
New Zealand	Auckland	5,955,456 00	71,693 02	41,247 67	57.5
North China	Shanghai	10,503,943 00	65,917 00	31,115 69	47.2
On Tai	Hong Kong	1,943,711 00	22,688 01	15,585 00	68.6
Providence-Washington	Providence, Rhode Island	1,241,589 00	34,009 52	10,078 14	29.3
Reliance Marine	Liverpool	287,845 00	4,832 58	1,891 77	39.2
Sea	Liverpool	4,020,940 00	45,333 00	13,175 00	29.1
South British Fire and Marine	Auckland	3,042,171 00	65,391 40	47,327 92	72.4
Standard Marine	Liverpool	2,621,373 00	30,740 38	21,912 30	71.2
St. Paul	St. Paul, Minnesota	213,125 00	1,888 85	22 37	1.2
Straits	Singapore	738,009 00	6,871 55	271 89	3.9
Switzerland Marine	Zurich	2,132,766 00	27,562 75	17,317 00	62.8
Thames and Mersey	Liverpool	11,646,477 00	172,825 29	125,890 99	72.8
Transatlantic Marine	Berlin	6,438,135 00	52,828 53	5,401 35	10.2

Union Fire and Marine	Christchurch, New Zealand	2,535,031 00	53,141 04	27,500 72	51.1
Union Insurance Society	Hong Kong	2,611,657 00	22,331 17	14,400 00	64.4
Union Marine	Liverpool	842,783 00	11,152 39	4,226 53	37.9
Universal Marine	London	210,600 00	210 00	None.	---
Yangtze	Shanghai	2,606,479 00	24,083 00	11,478 63	47.7
Totals .....	.....	\$109,180,036 00	\$1,297,057 07	\$650,062 44	50.9

TABLE No. 8.

Showing Marine Risks in Force, of Foreign Companies and Companies of other States, on December 31, 1888—California business.

NAME.	Location.	Risks.	Premiums.
Alliance Marine	London	\$91,374 00	\$3,427 99
Australian General	Sydney	34,082 00	602 67
Baloise	Basle, Switzerland	198,390 00	2,982 20
Boston Marine	Boston	350,081 00	22,347 84
British and Foreign Marine	Liverpool	4,150,230 00	51,022 13
Canton	Hong Kong	2,262,320 00	38,410 80
China Traders	Hong Kong	270,339 00	877 66
Commercial Union	London	1,089,228 00	15,471 58
Fonciere	Paris	1,698,963 00	18,987 55
Franco-Hungarian	Buda-Pesth	464,868 00	11,455 85
Globe Marine	London	None.	-----
Helvetia General	St. Gall, Switzerland	198,390 00	2,982 20
Indemnity Mutual Marine	London	323,023 00	4,537 49
Insurance Company of North America	Philadelphia	359,507 00	22,992 53
International Marine	Liverpool	39,250 00	1,285 28
London	London	1,375,421 00	15,314 88
London and Provincial Marine	London	848,393 00	9,875 94
Magdeburg General	Magdeburg	450,959 00	10,834 05
Mannheim	Mannheim	35,285 00	450 32
Man On	Hong Kong	133,066 00	795 71
Marine	London	1,000 00	17 50
Maritime	Liverpool	262,872 00	4,082 75
National Marine	London	172,201 00	2,256 15
New Zealand	Auckland	708,330 00	26,033 98
North China	Shanghai	903,863 00	11,599 11
On Tai	Hong Kong	323,239 00	1,567 96
Providence-Washington	Providence, R. I.	324,262 00	20,797 13
Reliance Marine	Liverpool	74,045 00	1,287 02
Sea	Liverpool	753,000 00	9,300 00
South British Fire and Marine	Auckland	1,364,016 00	54,914 69
Standard Marine	Liverpool	290,778 00	4,811 94
St. Paul	St. Paul, Minnesota	9,950 00	212 55
Straits	Singapore	87,028 00	1,076 95
Switzerland Marine	Zurich	198,391 00	2,982 20
Thames and Mersey	Liverpool	6,795,907 00	95,421 83
Transatlantic Marine	Berlin	354,993 00	5,153 06
Union Fire and Marine	Christchurch, N. Z.	671,921 00	31,854 41
Union Insurance Society	Hong Kong	407,418 00	3,800 21
Union Marine	Liverpool	308,872 00	6,382 77
Universal Marine	London	None.	-----
Yangtze	Shanghai	241,552 00	2,150 17
Totals .....	.....	\$28,636,467 00	\$520,357 05

TABLE NO. 9.

Showing New Policies Written during the year, Policies Renewed, and amount of Policies in Force on December 31, 1888, of Life Insurance Companies doing business in California—California business.

NAME.	Location.	NEW POLICIES WRITTEN.			POLICIES RENEWED.			POLICIES IN FORCE DECEMBER 31, 1888.			Losses and Endowments Paid.
		Number.	Amount.	Premium.	Number.	Amount.	Premium.	Number.	Amount.		
Pacific Mutual Life	San Francisco.	283	\$1,072,023 00	\$49,039 82	1,686	\$4,503,000 00	\$226,950 38	2,253	\$6,413,696 00	\$115,371 00	
Aetna Life	Hartford.	136	310,100 00	14,060 05	344	887,569 00	33,285 03	642	1,300,143 00	44,540 55	
Brooklyn Life	New York					129,000 00	2,663 19		129,000 00		
Connecticut Mutual Life	Hartford.	133	456,500 00	17,409 72	568	2,637,000 00	83,442 76	1,014	3,707,596 00	83,120 00	
Equitable Life	New York	473	3,630,500 00	163,420 04	1,462	7,622,900 00	310,372 81	2,187	11,701,717 00	121,953 65	
Germania Life	New York	33	164,000 00	7,539 61	2,140	3,424,505 00	73,164 05	2,182	3,619,824 00	92,851 96	
Hartford Life and Annuity	Hartford	28	102,000 00	16,069 00							
Home Life	New York	130	467,000 00	17,985 61	15	87,000 00	5,556 27	145	554,000 00		
Manhattan Life	New York	156	607,675 00	28,782 73	396	1,641,000 00	58,723 06	781	2,777,547 00	76,508 00	
Mutual Benefit Life	Newark	163	640,500 00	25,109 46	520	2,018,000 00	79,740 17	728	2,777,345 00	39,057 80	
Mutual Life	New York	811	4,901,450 00	244,915 11	3,093	11,321,350 00	479,138 89	4,980	18,021,542 00	310,330 03	
National Life	Montpelier, Vt.	76	280,000 00	7,533 42	165	182,500 00	7,426 42	241	462,500 00	None.	
New England Mutual Life	Boston	337	1,108,000 00	43,036 27	1,349	4,185,500 00	163,125 94	1,954	5,800,377 00	122,741 00	
New York Life	New York	720	5,091,500 00	251,958 07	1,120	6,782,000 00	192,624 34	1,673	9,540,000 00	104,446 21	
Northwestern Mutual Life	Milwaukee	265	839,000 00	36,289 14	750	1,829,992 00	84,971 55	1,015	2,686,992 00	44,155 00	
Penn Mutual Life	Philadelphia	93	325,000 00	4,740 74	1	3,000 00	107 58	91	314,000 00	10,000 00	
Provident Savings Life	New York	1	2,000 00	27 50				1	2,000 00		
Travelers	Hartford	70	156,983 00	4,843 12	283	720,700 00	25,540 19	353	848,683 00	8,000 00	
Union Central Life	Cincinnati	174	484,000 00	18,457 23	44	126,500 00	4,543 74	211	595,000 00	8,000 00	
Union Mutual Life	Portland, Me.	61	138,500 00	3,741 34	257	645,161 00	19,790 44	318	783,661 00	14,845 47	
United States Life	New York	43	133,000 00	1,830 99	102	187,495 00	7,091 34	145	320,495 00	1,200 00	
Washington Life	New York	27	58,624 00	1,934 20	161	415,200 00	16,254 72	219	504,670 00	7,986 17	
Phoenix Mutual Life	Hartford				126	239,088 00	5,905 76				
Totals		4,216	\$20,988,358 00	\$958,723 17	14,582	\$49,591,520 00	\$1,880,418 63	21,133	\$72,800,788 00	\$1,205,106 91	

TABLE No. 10.

Showing the business of *Accident, Fidelity, Steam Boiler, and Plate Glass Insurance Companies, for the year 1888—California business.*

NAME.	Location.	NEW POLICIES WRITTEN.			POLICIES RENEWED.			POLICIES IN FORCE DECEMBER 31, 1888.		Losses Paid.
		Number.	Amount.	Premium.	Number.	Amount.	Premium.	Number.	Amount.	
American Steam Boiler	New York	71	\$919,500 00	\$13,206 50	21	\$209,000 00	\$2,860 00	146	\$2,212,500 00	\$308 88
American Surety	New York	3	15,000 00	150 00	18	97,000 00	982 50	21	112,000 00	252 90
Employers Liability	London	227	602,000 00	3,585 50				162	524,000 00	3,239 11
Fidelity and Casualty	New York	739	2,307,800 00	16,021 27	404	1,781,836 00	12,160 92	984	3,388,252 00	332 65
Hartford Steam Boiler	Hartford	40	187,500 00	2,433 00	142	586,750 00	8,399 05	170	851,000 00	102 91
Lloyd's Plate Glass	New York	57	28,612 00	933 39	3	1,033 00	56 67	61	30,409 00	1,774 36
Metropolitan Plate Glass	New York	109	81,105 00	2,510 89	126	98,489 00	2,650 37	192	128,400 00	11,180 09
Pacific Mutual Life	San Francisco	1,940	5,195,500 00	26,620 74	677	2,362,250 00	14,088 25	1,757	4,800,750 00	6,052 14
Pacific Surety	San Francisco	1,984	4,832,745 00	31,045 18	9	33,000 00	230 50	518	1,869,000 00	18,254 38
Travelers	Hartford	6,975	21,382,450 00	32,171 92	873	3,294,400 00	17,641 00	2,142	7,545,350 00	
Cal. Title Ins. and Trust Co.	San Francisco	758	3,455,901 00	24,466 75				1,143	4,464,006 00	
Totals		12,423	\$38,702,113 00	\$153,145 14	2,273	\$8,464,388 00	\$59,039 26	7,296	\$25,896,267 00	\$41,497 62

TABLE No. 11.

Showing the year of organization, location, name of President, Secretary, and Agent or Attorney for California, and date of certificate of authority issued by the Insurance Commissioner, and the date of commencement of business in California of all Insurance Companies authorized to transact business on December 31, 1888.

Year of Organization.	NAME.	Location.	President.	Secretary.	Agent for California.	Date of Certificate Issued by Insurance Commissioner.	Commenced Business in California.
1888	Alta Fire	Stockton	J. M. Welsh	M. D. Baker		May 9, 1888	May 12, 1888
1887	Anglo-Nevada	San Francisco	Louis Sloes	Z. P. Clark		Dec. 1, 1885	Dec. 1, 1885
1861	California	San Francisco	L. L. Bromwell	W. H. C. Fowler		June 24, 1868	Feb. 1, 1861
1872	Commercial	San Francisco	John H. Wise	Chas. A. Laton		March 1, 1872	March 1, 1872
1863	Fremont's Fund	San Francisco	D. J. Staples	Wm. J. Dutton		June 24, 1868	June 18, 1863
1864	Home Mutual	San Francisco	J. F. Houghton	Chas. R. Story		June 24, 1868	Dec. 13, 1864
1880	Oakland Home	Oakland	Wm. P. Jones	Wm. F. Blood		Feb. 5, 1880	Feb. 5, 1880
1885	Southern California	Los Angeles	D. F. Spence	D. E. Miles		Feb. 21, 1885	Feb. 21, 1885
1871	State Investment	San Francisco	G. L. Brauder	Chas. H. Cushing		Jan. 13, 1872	Jan. 13, 1872
1882	Sum	San Francisco	N. T. Taylor	E. E. Potter		Feb. 1, 1882	Feb. 1, 1882
1865	Union	San Francisco	C. T. James	Jas. D. Bailey	G. C. Boardman	June 27, 1868	June 20, 1865
1819	Etna	Hartford	J. Goodnow	A. C. Bayne	Mann & Wilson	August 2, 1876	June 20, 1865
1863	Acetnaul	Watertown, N. Y.	J. R. Stebbins	H. M. Stevens	Parrott & Co.	May 28, 1881	May 28, 1876
1824	Alliance Marine	London	Lord Rothschild	Douglas Owen	Rolla V. Watt	October 1, 1872	October 1, 1872
1871	Amazon	Chicinnati	Gazzam Gauo	J. H. Beattie	Balfour, Guthrie & Co.	August 13, 1883	August 13, 1883
1846	American	Newark	F. H. Harris	J. H. Worden	E. E. Potter	Sept. 19, 1888	Sept. 19, 1888
1818	American	Boston	F. Peabody	J. W. Field	Rolla V. Watt	April 15, 1874	April 15, 1874
1865	American Central	St Louis	Geo. T. Gram	C. Christensen	Brown, Craig & Co.	October 31, 1872	October 31, 1872
1810	American Fire	Philadelphia	T. H. Montgomery	R. Maris	Barter & Haldan	Feb. 18, 1887	Feb. 18, 1887
1857	American Fire	New York	David Adge	W. H. Crollus	H. M. Newhall & Co.	August 15, 1885	August 15, 1885
1808	Atlas	London	Sir W. J. W. Baynes	S. J. Pipkin	J. J. Moore & Co.	May 3, 1887	May 3, 1887
1866	Australian General	Sydney	Chas. Smith	H. F. Fox	H. W. Szv	Nov. 28, 1876	Nov. 28, 1876
1864	Batise	Basle, Switzerland	R. Iselin	C. Blanckarts	H. N. Knowles	August 22, 1882	August 22, 1882
1873	Boston Marine	Boston	R. B. Fuller	Thos. H. Lord	H. M. Newhall & Co.	Dec. 16, 1885	Dec. 16, 1885
1872	Baylston	Boston	Jos. W. Balch	Geo. E. Robbins	Chas. J. Ockell & Co.	March 11, 1875	March 11, 1875
1853	British America*	Toronto	John Morrison	A. McNeill	Balfour, Guthrie & Co.	October 10, 1868	October 23, 1864
1865	British and Foreign Marine	Liverpool	Thos. Chilton	D. J. Surreme	Balfour, Guthrie & Co.	July 24, 1885	July 24, 1885
1866	Calcedonian	Edinburgh	J. Deuchar	W. A. Cruikshank	Parrott & Co.	June 1, 1882	June 1, 1882
1881	Canion	Hong Kong	L. Poesnecker	W. H. Ray	Williams, Dimond & Co.	Sept. 4, 1871	Sept. 4, 1871
1865	China Traders	Hong Kong	J. B. M. Kehler	J. F. Harrison	Mann & Wilson	Nov. 27, 1883	Nov. 27, 1883
1837	Citizens	St. Louis	E. A. Walton	F. M. Parker	C. Bertheau	Jan. 18, 1887	Jan. 18, 1887
1826	Citizens	New York	E. A. Reno	C. F. Runck	Mann & Wilson	May 19, 1881	May 19, 1881
1841	Citizens	Chicinnati	F. X. Reno	L. C. Phillips	W. J. Callingham	June 22, 1870	June 22, 1870
1881	City of London Fire*	London	Sir H. E. Knight	Henry Mann	C. F. Mullins	April 22, 1885	April 22, 1885
1881	Commercial Union	London	F. W. Harris	G. Wollager	Jacobs & Easton	August 20, 1873	August 20, 1873
1870	Commercial Union	Milwaukee	J. H. Inbusch	C. R. Burt	Mann & Wilson	Sept. 21, 1872	Sept. 21, 1872
1850	Connecticut Fire	Hartford	J. D. Browne	Cyrus Peck	Gutte & Frank	August 1, 1887	August 1, 1887
1852	Continental	New York	H. H. Lampert	John Carswell			
1880	Economic Fire	London	S. S. Lloyd				

TABLE No. 11—Continued.

Year of Organization.	NAME.	Location.	President.	Secretary.	Agent for California.	Date of Certificate Issued by Insurance Commissioner.	Commenced Business in California.
1872	Farragut Fire	New York	J. E. Leffingwell	S. Darbee	C. Bertheau	October 28, 1887	October 28, 1887
1820	Fire Association	Philadelphia	J. Lightfoot	W. S. Winship	Chas. A. Laton	Dec. 9, 1873	Dec. 9, 1873
1825	Fremont's	Baltimore	J. M. Anderson	F. C. S. Wolfe	Mann & Wilson	Nov. 24, 1880	Nov. 24, 1880
1855	Fremont's	Newark	John H. Kase	C. C. Oyer	Mann & Wilson	June 2, 1885	June 2, 1885
1879	Fretiere	Paris	A. Frassinetti	M. Montier	Mann & Wilson	Nov. 20, 1880	Nov. 20, 1880
1829	Franklin Fire	Philadelphia	J. W. McAllister	E. T. Cresson	R. E. Potter	May 15, 1885	May 15, 1885
1837	France-Hungarian	Buda-Pesth	S. Billi	L. Mascovis	Guthe & Frank	Dec. 20, 1886	Dec. 20, 1886
1879	General Life and Fire	London	Sir Andrew Lusk	Henry Ward	Guthe & Frank	Sept. 21, 1888	Sept. 21, 1888
1865	German-American	Freeport, Illinois	M. Hettiger	F. Gind	Jacobs & Easton	April 9, 1883	April 9, 1883
1866	Germania	New York	E. Oelherman	J. A. Silvey	Tom C. Grant	Oct. 10, 1873	Oct. 10, 1873
1859	Germania Fire	New Orleans	H. Zuberhfer	E. Weber	Jos. C. Jennings & Co.	April 2, 1888	April 2, 1888
1853	Grand Fire and Marine	New York	R. Garrigue	H. Schumann	Guthe & Frank	October 25, 1869	October 25, 1869
1849	Globe Fire and Marine	Philadelphia	R. S. Gillett	E. F. Merrill	Mann & Wilson	Sept. 25, 1872	Sept. 25, 1872
1885	Gracie State Fire	Glen's Falls	R. M. Little	J. F. Cunningham	Jacobs & Easton	April 8, 1876	April 8, 1876
1870	Globe Marine	Portsmouth, N. H.	E. Jones	A. F. Howard	Chas. A. Laton	March 15, 1887	March 15, 1887
1821	Globe Fire and Life	London	B. Whitworth	T. G. C. Browne	W. T. Coleman & Co.	Feb. 26, 1877	Feb. 26, 1877
1876	Handburg Bremen	Handburg	John B. Martin	S. Von Borrien	W. J. Landers	October 24, 1876	October 24, 1876
1852	Handburg Fire	Handburg	O. Schroeder	T. Hupeden	Speyer & Herold	Sept. 26, 1868	Sept. 26, 1868
1810	Hanover Fire	New York	A. Breitkow	I. Remgen Hime	Guthe & Frank	August 16, 1876	August 16, 1876
1858	Holvetta General	Hartford	Geo. L. Chase	P. C. Royce	C. Bertheau	October 25, 1869	October 25, 1869
1861	Helvetia Swiss Fire	St. Gall, Switzerland	C. B. Jacob	M. J. Grossman	Belden & Coffan	Jan. 17, 1870	Jan. 17, 1870
1853	Hime	New York	C. A. Heald	M. J. Grossman	H. W. Syz	Nov. 26, 1876	Nov. 26, 1876
1863	Imperial Fire	London	J. McConnell	W. L. Bigelow	H. W. Syz	Dec. 6, 1876	Dec. 6, 1876
1824	Indemnity Mutual Marine	London	D. Lamach	E. C. Smith	A. E. Magill	Nov. 13, 1868	Nov. 13, 1868
1794	Insurance Co. of North America	Philadelphia	Chas. Platt	H. C. Stewart	Geo. D. Dornin	Sept. 26, 1868	Sept. 26, 1868
1794	Ins. Co. of the State of Pennsylvania	Philadelphia	Geo. E. Crowell	G. E. Fryer	Thos. A. Mitchell	October 11, 1888	October 11, 1888
1879	International Marine	Liverpool	T. B. Roydon	A. B. Earle	Brown, Craig & Co.	Feb. 15, 1878	Feb. 15, 1878
1852	Launcehire	Manchester	N. Sheltonline	W. W. Clay	Dundlish & Co.	August 26, 1880	August 26, 1880
1887	Liberty	New York	G. A. Morrison	Geo. Stewart	E. W. Carpenter	July 10, 1887	July 10, 1887
1879	Lion Fire	London	Ellis M. Jones	S. B. Weed	Ralla Y. Watt	July 9, 1887	July 9, 1887
1836	Liverpool and London and Globe	Liverpool	John B. Bell	Thos. B. Bell	Geo. D. Dornin	April 12, 1880	April 12, 1880
1720	London and Lancashire	London	John M. Dwyer	Alex. B. Haven	Chas. D. Haven	Sept. 26, 1868	Sept. 26, 1868
1860	London and Provincial Marine	Liverpool	G. W. Campbell	J. F. Lannoue	Raid, Dickson	August 28, 1872	August 28, 1872
1823	Long Island	London	C. G. Fothergill	J. E. Duff	Balmour, Guthrie & Co.	Nov. 6, 1879	Nov. 6, 1879
1844	Magdeburg Fire	Brooklyn	J. Ogden	H. Bladeford	U. B. Wilson	June 26, 1888	June 26, 1888
1872	Magdeburg General	Magdeburg	R. Teschmarke	E. F. Mithcke	Guthe & Frank	Sept. 6, 1886	Sept. 6, 1886
1824	Manchester Fire	Manchester	J. B. Northcutt	Th. Daumman	Guthe & Frank	August 31, 1878	August 31, 1878
1879	Manheim	Manheim	F. Engelhorn	C. Girtanner	Balmour, Guthrie & Co.	April 22, 1880	April 22, 1880
1881	Man On	Hong Kong	Quan Hot Chuen	Woo Lin Yuen	W. Loiza	Nov. 10, 1884	Nov. 10, 1884
1810	Manufacturers and Builders Fire	New York	E. V. Low	J. J. Nestell	Track, Chong & Co.	October 31, 1881	October 31, 1881
					Mailhard & Dickson	October 31, 1888	October 31, 1888

1836	Marine	London	R. W. Willis	F. A. White	G. W. McNear	Sept. 14, 1877	Sept. 14, 1877
1864	Marine	Liverpool	J. B. Smith	R. S. Sanford	E. L. Woods	July 3, 1874	July 3, 1874
1869	Mechanics and Traders	New Orleans	L. B. Coleman	G. H. Frost	N. D. Coleman	Jan. 3, 1887	Jan. 3, 1887
1868	Mechanics	Newark	Henry Powles	J. R. Mulliken	Jacobs & Easton	Jan. 1, 1882	Jan. 1, 1882
1881	Michigan Fire and Marine	Detroit	D. Whitney, Jr.	R. Harlock	Chas. J. O'Neil & Co.	June 28, 1886	June 28, 1886
1823	National Fire	Dublin	H. T. Drowne	H. Biegelbach	H. M. Newhall & Co.	October 18, 1884	October 18, 1884
1838	National Fire	New York	J. Nichols	J. H. Kattenstroth	Wm. J. Dutton	May 13, 1879	May 13, 1879
1871	National Marine	Hartford	Thos. Bell	E. G. Richards	Geo. D. Bordin	August 3, 1884	August 3, 1884
1882	New Hampshire Fire	London	J. A. Weston	Wm. Gray	Gutfe & Frank	October 9, 1883	October 9, 1883
1869	Saw Hampshire Fire	Manchester	J. L. Campbell	J. C. French	Chas. A. Eaton	Nov. 30, 1880	Nov. 30, 1880
1859	New Zealand	Auckland	P. Notman	G. P. Pierce	Hugh Craig	March 27, 1875	March 27, 1875
1870	Niagara Fire	New York	Silas Pearce	W. Pollock	Spyer & Herold	October 18, 1878	October 18, 1878
1872	North American	Boston	G. H. Burnett	C. E. Macaulay	E. E. Potter	March 27, 1884	March 27, 1884
1873	North British and Mercantile	London	E. H. Lavers	Alex. Ross	Tom C. Grant	October 13, 1882	October 13, 1882
1867	North China	Shanghai	Sir P. Currie	J. Valentine	Macdonald & Co.	June 13, 1876	June 13, 1876
1836	Northern	London	J. Nordholm	C. Berger	Robt. Dickson	Sept. 26, 1868	Sept. 26, 1868
1868	North German Fire	Hamburg	Lee Shing	C. E. Bignold	Walter Spyer	Sept. 20, 1877	Sept. 20, 1877
1797	Norwich Union	Hong Kong	H. S. Patterson	Ho Annd	E. W. Carpenter	July 13, 1877	July 13, 1877
1877	On Tai	Portland	L. White	E. Hall	Kwong Hong On	Nov. 22, 1877	Nov. 22, 1877
1881	Oregon Fire and Marine	Portland	C. B. Whiting	J. U. Taitner	Mann & Wilson	August 27, 1884	August 27, 1884
1867	Orient	Hartford	F. T. Stinson	George Jeremiah	George D. Dornin	March 10, 1881	March 10, 1881
1871	Pacific Fire	New York	J. Devereux	J. L. Thompson	Rolla V. Watt	March 23, 1881	March 23, 1881
1825	Pennsylvania Fire	Philadelphia	S. B. Stearns	Philiander Shaw	Brown, Craig & Co.	Dec. 20, 1875	Dec. 20, 1875
1885	Peoples Fire	Manchester, N. H.	G. P. Moore	C. H. Burdick	Chas. J. O'Neil & Co.	May 9, 1887	May 9, 1887
1853	Phoenix	Brooklyn	H. Kellogg	W. C. McDonald	Brown, Craig & Co.	August 25, 1884	August 25, 1884
1854	Phoenix	Hartford	G. A. Fuller	W. C. McDonald	Butler & Haldan	Nov. 9, 1868	Nov. 9, 1868
1782	Phoenix	London	J. H. DeWolf	J. B. Brunch	U. B. Wilson	July 16, 1868	July 16, 1868
1790	Providence-Washington	Providence, R. I.	H. Thone	O. Nochner	H. B. Wilson	Dec. 22, 1879	Dec. 22, 1879
1815	Prussian National	Stettin	J. A. McDonald, U. S. Manager	A. Bennet, Jr., U. S. Manager	H. B. Wilson	Dec. 31, 1874	Dec. 31, 1874
1828	Queen's	Liverpool	W. Blain	T. W. Dixon	Robert Dickson	Nov. 15, 1881	Nov. 15, 1881
1881	Reliance Marine	Liverpool	J. H. McLaren	Digby Johnson	Henry Lund	March 10, 1874	March 10, 1874
1845	Royal	Liverpool	G. H. Bigelow	C. B. Gilbert	E. W. Carpenter	Dec. 19, 1881	Dec. 19, 1881
1865	St. Paul	St. Paul	Alex. Hall	A. Pihlgren	Mann & Wilson	June 23, 1869	June 23, 1869
1881	Scania	Malmö, Sweden	R. F. Wood	W. Bates	W. Derckson	Sept. 23, 1872	Sept. 23, 1872
1824	Scottish Union and National*	Edinburgh	W. Bennett, Jr., U. S. Manager	W. Bates	W. J. Callingham	Sept. 21, 1888	Sept. 21, 1888
1875	Sea	Liverpool	C. S. Leefe	H. Mason	Mayer, Wilson & Co.	July 19, 1881	July 19, 1881
1811	Security	New Haven	W. C. Paily	G. Johnston	U. B. Wilson	Jan. 12, 1877	Jan. 12, 1877
1872	South British Fire and Marine	Auckland	S. McTehee	H. Mason	A. S. Murray	August 23, 1877	August 23, 1877
1882	Southern	New Orleans	J. N. Dumbaum	S. J. Hall	J. C. Jennings & Co.	Dec. 7, 1886	Dec. 7, 1886
1849	Springfield Fire and Marine	Springfield, Mass	W. Watson	J. Glick	J. C. Jennings & Co.	April 6, 1881	April 6, 1881
1871	Standard Marine	Liverpool	T. Solst	C. D. Kerr	J. D. Speckels & Bros.	June 28, 1881	June 28, 1881
1887	Stants	Singapore	T. Solst	C. D. Kerr	Geo. Marcus & Co.	July 18, 1884	July 18, 1884
1886	Stants Fire	Singapore	C. O. Kjallberg	E. Boye	Geo. Marcus & Co.	March 14, 1887	March 14, 1887
1806	Swedish Fire and Life	Göteborg, Sweden	J. J. Guile, U. S. Manager	H. Carpenter	Muecke & Co.	Sept. 22, 1884	Sept. 22, 1884
1719	Sun Fire*	London	J. J. Day	H. Knorr	Mann & Wilson	Feb. 26, 1886	Feb. 26, 1886
1867	Sun Mutual	New Orleans	R. Naef	J. Knorr	J. C. Jennings & Co.	April 13, 1885	April 13, 1885
1869	Switzerland Marine	Zurich	R. B. Ames	Jacob Stone	H. W. 8vz	October 7, 1874	October 7, 1874
1867	Switzerland	Minneapolis	W. B. Ames	Jacob Stone	O'Neil & Woodley	March 8, 1888	March 8, 1888
1871	T. Ontario	New Orleans	W. B. Schmidt	A. P. Null	Mann & Wilson	April 18, 1879	April 18, 1879
1869	Tadous and Morsey	Liverpool	E. P. Bates	J. Kilman	W. G. Harrison	August 21, 1876	August 21, 1876
1865	Tadous	Chicago	E. Duckingham	R. J. Smith	William F. Blood	June 6, 1873	June 6, 1873
1872	Transatlantic Fire	Hamburg	W. Jacobsen	J. Blumberger	Geo. Marcus & Co.	August 2, 1872	August 2, 1872
1872	Transatlantic Marine	Berlin	E. Heigersburg	J. A. Fiedler	Thumhauser & Co.	June 24, 1873	June 24, 1873

TABLE No. 11—Continued.

Year of Organization.	NAME.	Location.	President.	Secretary.	Agent for California.	Date of Certificate Issued by Insurance Commissioner.	Commenced Business in California.
1804	Union	Philadelphia	C. S. Hollinshead	J. M. Gowell	Jacobs & Easton	October 11, 1880	October 11, 1880
1835	Union	Hong Kong	P. Ryrie	J. Edo	J. D. Sprackels & Bros.	Dec. 18, 1883	Dec. 18, 1883
1877	Union Fire and Marine	Christchurch, N. Z.	J. T. Peacock	W. Deane	L. L. Bromwell	Feb. 27, 1882	Feb. 27, 1882
1863	Union Marine	Liverpool	T. D. Horby	W. Gow	L. L. Bromwell	July 3, 1874	July 3, 1874
1877	United Fire*	Manchester	W. Wood, U. S. Munro	G. E. Cuck	Munn & Wilson	July 28, 1884	July 28, 1884
1824	United States Fire	New York	W. W. Underhill	Alfred Tozer	Jacobs & Easton	April 7, 1882	April 7, 1882
1860	Universal Marine	London	Sir J. Lubbock	J. Q. Underhill	W. B. Chapman	October 4, 1877	October 4, 1877
1837	Westchester Fire	New York	G. R. Crawford	J. Bomor	A. C. Donnell	March 20, 1885	March 20, 1885
1851	Western*	Toronto	A. M. Smith	F. H. Way	Swett & Jones	Jan. 12, 1877	Jan. 12, 1877
1853	Williamsburg City Fire	Brooklyn	E. Briggs	Russell & Co.	E. H. Potter	Feb. 12, 1881	Feb. 12, 1881
1862	Yangtze	Shanghai	C. V. Smith	J. N. Patton	Marandray & Co.	October 23, 1868	Oct. 23, 1868
1820	Yankee Mutual Life	San Francisco	M. G. Bulkeley	J. L. English	John H. Stevens	March 27, 1879	March 27, 1879
1846	Yankee Life	Hartford	J. L. Greene	W. G. Abbott	J. L. Fogg	June 21, 1880	June 21, 1880
1846	Equitable Life	New York	H. R. Hyde	W. Alexander	North & Snow	July 3, 1878	July 3, 1878
1869	Germania Life	New York	H. Wesendonck	C. Doremus	Julius Jacobs	Feb. 11, 1879	Feb. 11, 1879
1866	Hartford Life and Annuity	Hartford	F. E. Foster	S. Ball	T. Ellsworth	Nov. 11, 1884	Nov. 11, 1884
1860	Homo Life	New York	G. C. Ripley	G. H. Ripley	W. H. Murphy	October 11, 1887	October 11, 1887
1850	Maritime Life	New York	J. M. McLean	H. Y. Wemple	John Landers	August 2, 1878	August 2, 1878
1847	Mutual Benefit Life	Newark	Amzi Dodd	E. L. Dobbin	James Munson, Jr.	Sept. 7, 1880	Sept. 7, 1880
1842	Mutual Life	New York	R. A. McChardy	W. J. Easton	A. B. Forbes	July 1, 1878	July 1, 1878
1848	National Life	Montpelier, Vt.	Charles Dewey	G. W. Reed	H. K. Stoll	June 21, 1880	June 21, 1880
1835	New England Mutual Life	Boston	B. F. Stevens	S. F. Trail	H. K. Field	Sept. 26, 1868	Sept. 26, 1868
1841	New York Life	New York	H. L. Boers	A. H. Welch	A. G. Hawes	August 20, 1878	August 20, 1878
1857	Northwestern Mutual Life	Milwaukee	H. L. Palmer	J. W. Schiner	C. M. Smith	May 31, 1882	May 31, 1882
1847	Penn Mutual Life	Philadelphia	E. M. Needles	H. C. Brown	E. H. Hart	Feb. 24, 1888	Feb. 24, 1888
1875	Provident Savings Life	New York	Sheppard Homans	W. E. Stevens	J. L. Fields	October 17, 1888	October 17, 1888
1867	Travelers	Hartford	J. G. Batterson	R. Dennis	W. W. Haskell	July 19, 1878	July 19, 1878
1867	Union Central Life	Cincinnati	John Davis	E. P. Marshall	F. A. Archibald	Feb. 25, 1885	Feb. 25, 1885
1848	Union Mutual Life	Portland, Me.	J. E. DeWitt	A. L. Bates	M. M. Eaton	Sept. 11, 1868	Sept. 11, 1868
1860	United States Life	New York	G. H. Barford	C. P. Fraleigh	Dr. I. Redmon	May 14, 1883	May 14, 1883
1860	Washington Life	New York	W. A. Brewer, Jr.	C. Munn	John H. Gray	Feb. 5, 1881	Feb. 5, 1881
1885	Phoenix Mutual Life	Hartford	Wallace Everson	A. P. Redding	E. P. Gray	August 26, 1880	August 26, 1880
1885	Pacific Surety	San Francisco	Geo. T. Marry, Jr.	M. B. Clapp	Conrad & Maxwell	August 4, 1885	August 4, 1885
1883	American Steam Boiler	San Francisco	W. K. Lathrop	V. B. Schenck	Chas. J. Okell & Co.	March 11, 1887	March 11, 1887
1884	American Surety	New York	F. A. Wheelock	F. F. Nugent	H. E. Osborn	Dec. 5, 1884	Dec. 5, 1884
1880	Employers Liability	London	Lord C. Hamilton	S. S. Brown	Chas. J. Okell & Co.	June 20, 1887	June 20, 1887
1876	Fidelity and Casualty	New York	W. M. Richards	R. J. Hillas	J. R. Garniss	March 4, 1881	March 4, 1881
1846	Hartford Steam Boiler	Hartford	J. M. Allen	J. B. Pierce	Munn & Wilson	Nov. 6, 1884	Nov. 6, 1884
1882	Lloyds Plate Glass	New York	J. G. Beemer	W. T. Woods	Rolla V. Watt	Dec. 6, 1887	Dec. 6, 1887
1874	Metropolitan Plate Glass	New York	H. Barreau	E. H. Winslow	Munn & Wilson	May 8, 1879	May 8, 1879

* United States branch statement.

ANNUAL STATEMENTS.

ALTA FIRE INSURANCE COMPANY.

LOCATED AT STOCKTON, CALIFORNIA—ORGANIZED JANUARY 30, 1888.

J. M. WELSH, President.

M. D. BAKER, Secretary.

Joint stock capital authorized	\$200,000 00
Joint stock capital paid up in cash	100,000 00

FOR THE YEAR ENDING DECEMBER 31, 1888.

ASSETS.

Loans on mortgages (first liens) upon which not more than one year's interest is due			\$74,825 00
Interest due and accrued on said mortgage loans			2,383 50
Stocks and bonds owned absolutely by the company:			
	Par Value.	Market Value.	
4 bonds Willow School District, San Joaquin County, 6 per cent.	\$4,000 00	\$4,100 00	4,100 00
Cash in office and in banks			17,586 41
Interest accrued on bonds, not included in "Market Value"			253 75
Gross premiums in due course of collection			19,818 59
Total			\$118,967 25

LIABILITIES.

Gross premiums on fire risks running one year or less, \$29,697 21; unearned premium, 50 per cent	\$14,848 60		
Gross premiums on fire risks running more than one year, \$4,161 61; unearned premium, pro rata	3,477 09		
			\$18,325 69
Commissions and brokerage due and to become due			494 55
Gross liabilities, except capital stock			\$18,820 24
Surplus as regards policy holders			\$100,147 01
Capital stock paid up in cash			100,000 00
Surplus over paid up capital and all other liabilities			\$147 01

INCOME.

Net cash received for premiums	\$23,256 71
Received for interest on bonds and loans	381 55
Total cash income	\$23,638 26

EXPENDITURES.

Amount paid for losses	\$5,517 62
Paid for commissions and brokerage	5,667 89
Salaries, fees, and all other charges of officers, clerks, agents, and all other employés	7,315 26
All other payments and expenditures	8,923 25
Total cash expenditures	\$27,424 02

ALTA FIRE INSURANCE COMPANY--Continued.

RISKS AND PREMIUMS.

	Fire Risks.	Premiums thereon.
Written during the year.....	\$3,042,547 00	\$52,951 75
Deduct expirations and cancellations.....	827,906 00	11,519 52
In force at the end of the year.....	\$2,214,641 00	\$41,435 23
Deduct amount reinsured.....	428,839 00	7,576 41
Net amount in force.....	\$1,785,802 00	\$33,858 82

ANGLO-NEVADA ASSURANCE CORPORATION.

LOCATED AT SAN FRANCISCO—ORGANIZED NOVEMBER, 1885.

LOUIS SLOSS, President.

Z. P. CLARK, Secretary.

Joint stock capital authorized.....	\$2,000,000 00
Joint stock capital paid up in cash.....	2,000,000 00

YEAR ENDING DECEMBER 31, 1888.

ASSETS.

Loans on mortgages (first liens) upon which not more than one year's interest is due.....		\$1,021,807 55
Interest accrued upon said mortgage loans.....		14,862 13
Bonds owned absolutely by the company:		
	Par Value.	Market Value.
Southern Pacific Railroad of Arizona bonds, 6 per cent.....	\$695,000 00	\$733,225 00
Sutter Street Railway first mortgage bonds.....	100,000 00	105,000 00
City of Portland, Oregon, Water bonds.....	50,000 00	57,805 55
Omnibus Cable Company, first mortgage bonds, 6 per cent.....	50,000 00	55,000 00
Los Angeles City Water Company, first mortgage bonds, 6 per cent.....	20,000 00	21,000 00
	\$915,000 00	\$972,030 55
Stocks, bonds, and other securities, hypothecated to the company as collateral security for cash loaned by the company:		972,030 55
	Market Value.	Am't. Loaned.
150,000 wheat bags in warehouse.....	\$11,625 00	\$7,500 00
157 bags coffee in warehouse.....	3,464 46	2,500 00
168 bags coffee in warehouse.....	3,941 00	2,750 00
1,091,045 pounds wheat in warehouse.....	15,820 15	11,800 00
1,859,067 pounds wheat in warehouse.....	26,956 47	20,000 00
663,323 pounds wheat in warehouse.....	9,618 18	7,100 00
1,532,475 pounds wheat in warehouse.....	22,220 88	16,500 00
1,885,000 wheat bags in warehouse.....	122,525 00	70,687 50
4,271,000 wheat bags in warehouse.....	331,002 50	211,950 00
2,320,372 pounds wheat in warehouse.....	33,645 39	25,000 00
		375,787 50
Cash in office and in banks.....		81,860 89
Interest due and accrued on bonds, not included in "Market Value".....		3,025 00
Interest due and accrued on collateral loans.....		1,905 67
Gross premiums in due course of collection.....		151,190 29
Due from other companies for reinsurance on losses already paid.....		1,618 66
Total.....		\$2,624,088 24

ANGLO-NEVADA ASSURANCE CORPORATION—Continued.

LIABILITIES.

Losses adjusted and unpaid.....	\$13,270 44	
Losses in process of adjustment.....	39,669 13	
Losses resisted.....	750 00	
Total.....	\$53,689 57	
Deduct reinsurance thereon.....	360 84	
		\$53,328 73
Gross premiums on fire risks running one year or less, \$680,833 07; unearned premium, 50 per cent.....	\$340,416 58	
Gross premiums on fire risks running more than one year, \$209,176 55; unearned premium, pro rata.....	130,865 74	
Gross premiums on marine and inland navigation risks, \$7,281 79; unearned premium, 100 per cent.....	7,281 79	
Gross premiums on marine time risks, \$16,120 83; unearned premium, 50 per cent.....	8,060 41	
		486,624 52
Commissions and brokerage due and to become due.....		7,430 96
Return premiums.....		3,391 06
Gross liabilities except capital stock.....		\$550,775 27
Surplus as regards policy holders.....		\$2,073,312 97
Capital stock paid up in cash.....		2,000,000 00
Surplus over paid up capital and all other liabilities.....		\$73,312 97
INCOME.		
	Fire.	Marine.
Net cash received for premiums.....	\$932,661 63	\$99,861 84
Received for interest on mortgages.....		63,159 87
Received for interest and dividends on stocks and bonds and collateral loans.....		45,032 81
Total cash income.....		\$1,140,716 15
EXPENDITURES.		
	Fire.	Marine.
Paid for losses, including \$41,154 48, losses in previous years.....	\$505,954 62	\$80,127 34
Paid for commissions and brokerage.....		221,388 62
Salaries, fees, and all other charges of officers, clerks, agents, and all other employés.....		54,789 33
Paid for taxes.....		10,600 71
All other payments and expenditures.....		104,567 46
Total cash expenditures.....		\$977,488 13

RISKS AND PREMIUMS.

	Fire Risks.	Premiums thereon.	Marine and In- land Risks.	Premiums thereon.
In force on December 31 of the preceding year.....	\$53,723,205 00	\$883,645 21	\$3,132,399 00	\$57,152 91
Written during the year.....	75,152,714 00	1,305,170 51	18,057,904 00	127,483 60
Totals.....	\$128,875,919 00	\$2,188,815 72	\$21,190,303 00	\$184,636 51
Deduct expirations and can- cellations.....	55,790,980 00	1,194,328 95	19,516,975 00	151,153 16
In force at the end of the year.....	\$73,084,939 00	\$994,486 77	\$1,673,328 00	\$33,483 35
Deduct amount reinsured.....	9,165,546 00	104,477 15	735,217 00	10,080 73
Net amount in force.....	\$63,919,393 00	\$890,009 62	\$938,111 00	\$23,402 62

CALIFORNIA INSURANCE COMPANY.

LOCATED AT SAN FRANCISCO—ORGANIZED FEBRUARY, 1861.

L. L. BROMWELL, President.

W. H. C. FOWLER, Secretary.

Joint stock capital authorized	\$600,000 00
Joint stock capital paid up in cash	600,000 00

YEAR ENDING DECEMBER 31, 1888.

ASSETS.			
Value of real estate owned by the company			\$104,000 00
Loans on mortgages (first liens) upon which not more than one year's interest is due			21,386 32
Interest accrued on said mortgage loans			520 00
Stocks and bonds owned absolutely by the company:			
	Par Value.	Market Value	
150 United States 4 per cent bonds	\$150,000 00	\$191,250 00	
25 Oakland Gas bonds	25,000 00	25,500 00	
35 Northern Pacific Railroad bonds	35,000 00	41,300 00	
24 Spring Valley Water bonds	24,000 00	29,820 00	
8 Pacific Rolling Mill Company bonds	8,000 00	8,400 00	
25 San Diego Gas and Electric Light bonds	25,000 00	25,750 00	
272 shares Bank of California stock	27,200 00	59,340 00	
300 shares First National Bank of S. F. stock	30,000 00	43,500 00	
551 shares Oakland Bank of Savings stock	27,550 00	35,815 00	
200 shares Grangers Bank stock	20,000 00	12,000 00	
100 shares California Wire Works Co. stock	10,000 00	5,000 00	
200 shares Pacific Rolling Mill Co. stock	20,000 00	20,000 00	
150 shares Cal. Safe Deposit and Trust Co. stock	15,000 00	8,250 00	
200 shares Wells, Fargo & Co. Bank stock	20,000 00	28,000 00	
200 shares London, Paris, and Am. Bank stock	20,000 00	20,400 00	
400 shares Oakland Gaslight and Heat Co. stock		14,000 00	
500 shares Spring Valley Water Co. stock	50,000 00	50,250 00	
200 shares Merced Sec. Savings Bank stock		7,000 00	
300 shares Contra Costa Water Co. stock		27,900 00	
160 shares San Francisco Gaslight Co. stock	16,000 00	9,440 00	
		\$663,415 00	663,415 00
Cash in office and in banks			335,400 87
Interest due and accrued on stocks, not included in "Market Value"			11,663 36
Gross premiums in due course of collection			132,082 45
Bills receivable, <i>not matured</i> , taken for fire, marine, and inland risks			36,138 26
Total			\$1,313,286 04
LIABILITIES.			
Losses adjusted and unpaid	\$18,970 00		
Losses in process of adjustment	71,560 92		
Losses resisted	4,100 00		
			\$94,570 92
Gross premiums on fire risks running one year or less, \$391,-348 47; unearned premium, 50 per cent		\$195,674 23	
Gross premiums on fire risks running more than one year, \$183,859 27; unearned premium, pro rata		105,871 90	
Gross premiums on marine and inland navigation risks, \$31,-714 63; unearned premium, 100 per cent		31,714 63	
Gross premium on marine time risks, \$94,038 97; unearned premium, 50 per cent		47,019 47	
			380,280 23
Commissions and brokerage due and to become due			17,085 84
Total liabilities, except capital stock			\$491,936 99
Surplus as regards policy holders			\$821,349 05
Capital stock paid up in cash			600,000 00
Surplus over paid up capital and all other liabilities			\$221,349 05

CALIFORNIA INSURANCE COMPANY—Continued.

INCOME.		Fire.	Marine.	
Net cash received for premiums.....		\$469,128 53	\$194,100 47	\$663,229 00
Received for interest on mortgages.....				\$1,457 54
Received for interest and dividends on stocks and bonds, and from all other sources.....				35,846 26
Received for rents.....				1,125 00
Received for profit on sale of investments.....				1,000 00
Total cash income.....				\$702,657 80
EXPENDITURES.		Fire.	Marine.	
Amount paid for losses, including \$36,577 32, losses in previous years.....		\$226,241 87	\$89,590 43	\$315,832 30
Cash dividends paid stockholders.....				72,000 00
Paid for commissions and brokerage.....				120,046 49
Salaries, fees, and all other charges of officers, clerks, agents, and all other employes.....				45,900 36
Paid for taxes.....				13,447 00
All other payments and expenditures.....				59,015 19
Total cash expenditures.....				\$626,241 34

RISKS AND PREMIUMS.

	Fire Risks.	Premiums thereon.	Marine and Inland Risks.	Premiums thereon.
In force on December 31 of the preceding year.....	\$34,251,243 00	\$488,401 56	\$1,924,851 00	\$96,352 50
Written during the year.....	42,599,880 00	590,036 24	14,706,834 00	300,876 61
Totals.....	\$76,851,123 00	\$1,078,437 80	\$16,631,694 00	\$397,229 11
Deduct expirations and cancellations.....	34,661,714 00	461,624 55	12,934,546 00	240,389 42
In force at the end of the year.....	\$42,189,409 00	\$616,813 25	\$3,697,148 00	\$156,839 69
Deduct amount reinsured.....	2,442,705 00	41,605 51	592,062 00	31,086 09
Net amount in force.....	\$39,746,704 00	\$575,207 74	\$3,105,086 00	\$125,753 60

COMMERCIAL INSURANCE COMPANY.

LOCATED AT SAN FRANCISCO—ORGANIZED FEBRUARY, 1882.

JOHN H. WISE, President.

CHARLES A. LATON, Secretary.

Joint stock capital authorized.....	\$200,000 00
Joint stock capital paid up in cash.....	200,000 00

YEAR ENDING DECEMBER 31, 1888.

ASSETS.			
Value of real estate owned by the company.....			\$5,030 80
Loans on mortgage (first liens) upon which not more than one year's interest is due.....			174,650 00
Interest due and accrued on said mortgage loans.....			1,641 17
Stocks and bonds owned absolutely by the company:			
	Par Value.	Market Value.	
50 United States bonds, 4-20's.....	\$50,000 00	\$63,562 50	
19 Shasta County bonds, 7 per cent.....	17,500 00	18,775 00	
1,900 shares Merchants' Exchange Bank stock, in liquidation.....	190,000 00	41,800 00	
205 shares Spring Valley Waterworks stock.....	20,500 00	20,653 75	
	\$278,000 00	\$144,791 25	144,791 25
Amount carried forward.....			\$320,113 22

COMMERCIAL INSURANCE COMPANY--Continued.

Amount brought forward.....				\$326,113 22
Stocks hypothecated to the company as collateral security for cash loaned by the company:				
	Par Value.	Market Value.	Amt. Loaned.	
115 shares First National Bank of San Diego.....	\$11,500 00	\$18,250 00	\$10,000 00	10,000 00
Cash in office and in banks				25,026 82
Interest due and accrued on collateral loans.....				264 74
Gross premiums in due course of collection.....				84,415 02
Bills receivable, <i>not matured</i> , taken for fire, marine, and inland risks.....				4,266 90
Total				\$450,086 70
LIABILITIES.				
Losses in process of adjustment.....				\$25,227 44
Gross premiums on fire risks, running one year or less, \$256-025 96; unearned premium, 50 per cent.....		\$128,012 98		
Gross premiums on fire risks, running more than one year, \$64,890 13; unearned premium, pro rata.....		37,567 74		
Gross premiums on marine and inland navigation risks, \$2-575 37; unearned premium, 100 per cent.....		2,575 37		
Gross premiums on marine time risks, \$9,277 34; unearned premium, 50 per cent.....		4,638 67		
				172,794 76
Commissions and brokerage due and to become due.....				1,468 70
Return premiums				1,870 62
Total liabilities, except capital stock				\$201,361 52
Surplus as regards policy holders.....				\$248,725 18
Capital stock paid up in cash				200,000 00
Surplus over paid up capital and all other liabilities				\$48,725 18
INCOME.				
		Fire.	Marine.	
Net cash received for premiums.....		\$379,407 99	\$23,316 64	\$402,724 63
Received for interest on mortgages.....				11,742 54
Received for interest on stocks and bonds and from other sources.....				24,491 52
Total cash income				\$438,958 69
EXPENDITURES.				
		Fire.	Marine.	
Paid for losses, including \$12,434 16, losses in previous years		\$237,359 53	\$16,968 82	\$254,328 40
Cash dividends paid stockholders.....				24,000 00
Paid for commissions and brokerage				85,649 70
Salaries, fees, and all other charges of officers, clerks, agents, and all other employes				33,299 62
Paid for taxes.....				8,041 49
All other payments and expenditures.....				30,291 04
Total expenditures.....				\$435,610 25

RISKS AND PREMIUMS.

	Fire Risks.	Premiums thereon.	Marine and Inland Risks.	Premiums thereon.
In force on December 31 of the preceding year.....	\$22,963,775 00	\$336,522 89	\$192,675 00	\$14,359 47
Written during the year	30,713,144 00	473,647 38	2,209,181 00	29,460 13
Totals	\$53,676,919 00	\$810,170 27	\$2,401,856 00	\$43,819 60
Deduct expirations and cancellations	29,235,965 00	467,051 31	2,078,800 00	30,822 35
In force at the end of the year.....	\$24,440,954 00	\$343,018 96	\$323,056 00	\$12,997 25
Deduct amount reinsured	1,233,510 00	22,102 87	28,617 00	1,144 53
Net amount in force	\$23,207,444 00	\$320,916 09	\$294,439 00	\$11,852 72

FIREMAN'S FUND INSURANCE COMPANY.

LOCATED AT SAN FRANCISCO—ORGANIZED MAY, 1863.

D. J. STAPLES, President.

WM. J. DUTTON, Secretary.

Joint stock capital authorized	\$1,000,000 00
Joint stock capital paid up in cash	1,000,000 00

YEAR ENDING DECEMBER 31, 1888.

ASSETS.

Value of real estate owned by the company	\$300,000 00
Loans on mortgages (first liens) upon which not more than one year's interest is due	277,200 00
Interest due and accrued on said mortgage loans	996 71
Stocks and bonds owned absolutely by the company:	

	Par Value.	Market Value.
Omnibus Cable Company bonds	\$100,000 00	\$110,000 00
Market Street Cable Railroad Company bonds	90,000 00	113,850 00
Powell St. Railway Company mortgage bonds	25,000 00	27,500 00
Oakland City Gaslight and Heat Co. bonds	50,000 00	51,500 00
Los Angeles Gas Company bonds	10,000 00	10,350 00
San Diego Gas and Electric Light Co. bonds	20,000 00	20,000 00
Riverside Water Company bonds	70,000 00	73,500 00
City of Portland, Oregon, Water bonds	50,000 00	56,750 00
Spring Valley Water Company bonds	29,000 00	36,105 00
California Dry Dock Company bonds	45,500 00	46,865 00
Pacific Rolling Mills bonds	22,000 00	23,320 00
Union Iron Works bonds	5,000 00	5,125 00
60 shares Bank of California stock	6,000 00	12,900 00
107 shares First National Bank of S. F. stock	10,700 00	15,247 50
100 shares Anglo-Californian Bank stock	5,000 00	6,250 00
277 shares Grangers Bank of California stock	16,620 00	17,312 50
270 shares Cal. Safe Deposit and Trust Co. st'k	12,150 00	14,040 00
450 shares Oakland Bank of Savings stock	22,500 00	29,250 00
100 shares Savings Bank of Santa Rosa stock	10,000 00	15,000 00
1,000 shares California Street Cable Co. stock	100,000 00	111,000 00
550 shares Presidio and Ferries R. R. Co. stock	30,250 00	23,375 00
300 shares N. Beach and Mission R. R. Co. stock	30,000 00	26,100 00
440 shares Sutter Street Railroad Co. stock	44,000 00	35,200 00
550 shares Oakland Gaslight and Heat Co. stock	11,000 00	19,250 00
250 shares Stockton Gaslight and Heat Co. stock	10,000 00	11,250 00
200 shares Pacific Gas Improvement Co. stock	6,666 66	13,000 00
500 shares California Dry Dock Company stock	50,000 00	17,500 00
250 shares Pacific Rolling Mills stock	25,000 00	25,000 00

\$906,386 66	\$966,540 00	966,540 00
--------------	--------------	------------

Stocks and bonds hypothecated to the company as collateral security for cash loaned by the company:

	Par Value.	Market Value.	Amt. Loaned.
60 shares Bank of California stock	\$6,000 00	\$12,900 00	\$35,600 00
188 shares First National B'k S. F. st'k	18,800 00	26,700 00	
30 bonds Pioneer Woolen Factory	15,000 00	15,000 00	
100 shares San Francisco Gaslight stock	10,000 00	5,900 00	2,750 00
25 shares Sonoma County Bank stock	2,500 00	3,750 00	2,250 00
2,950 shares Am. Biscuit Co. stock	295,000 00	221,250 00	89,000 00
440 shares Masonic Hall stock	4,400 00	5,060 00	4,000 00
90 bonds G. H. & S. A. R. R. Co.	90,000 00	90,000 00	75,000 00
400 shares Sonoma Co. Bank stock	40,000 00	44,800 00	40,000 00
20 shares Sonoma Co. Bank stock	2,000 00	2,240 00	4,000 00
25 shares Savings B'k of Santa Rosa st'k	2,500 00	3,750 00	
10 shares Knapton Packing Co. stock	1,000 00	1,250 00	950 00
55 bonds S. P. Branch Railway Co.	55,000 00	55,000 00	50,000 00
48 shares Savings B'k of Santa Rosa st'k	4,800 00	7,200 00	4,800 00
100 shares Bank of California stock	10,000 00	21,500 00	11,000 00
205 shares Fresno Gaslight stock	20,500 00	10,250 00	5,000 00
61 shares Bank of Sonoma County stock	6,100 00	6,832 00	4,800 00

Amount carried forward	\$583,600 00	\$533,472 00	\$328,550 00	\$1,544,736 71
------------------------------	--------------	--------------	--------------	----------------

FIREMAN'S FUND INSURANCE COMPANY—Continued.

	Par Value.	Market Value.	Am't. Loaned.	
Amount brought forward.....	\$583,600 00	\$533,472 00	\$328,550 00	\$1,544,736 71
300 shares Savings and Loan Society, San Francisco, stock.....	30,000 00	24,000 00	13,500 00	
20 shares Spring Valley Water Company stock.....	2,000 00	2,000 00	1,500 00	
130 shares Santa Rosa Athenæum Com- pany stock.....	13,000 00	13,000 00	8,000 00	
	\$628,600 00	\$572,472 00	\$351,550 00	351,550 00
Cash in office and in banks.....				133,136 24
Interest due and accrued on bonds and stocks, not included in "Market Value".....				14,289 54
Interest due and accrued on collateral loans.....				2,522 08
Gross premiums in due course of collection.....				200,362 56
Bills receivable, <i>not matured</i> , taken for fire, marine, and inland navigation risks.....				65,772 54
Rents due and accrued.....				175 00
Due from other companies for reinsurance on losses already paid.....				2,231 64
Total.....				\$2,314,776 31
LIABILITIES.				
Losses adjusted and unpaid.....			\$13,159 31	
Losses in process of adjustment.....			54,295 79	
Losses resisted.....			12,725 00	
Total.....			\$80,180 10	
Deduct reinsurance thereon.....			11,196 57	\$68,983 53
Gross premiums on fire risks running one year or less, \$742,527 43; unearned premium, 50 per cent.....			\$371,263 71	
Gross premiums on fire risks running more than one year, \$522,692 82; unearned premium, pro rata.....			296,194 24	
Gross premiums on marine and inland navigation risks, \$9,528 26; unearned premium, 100 per cent.....			9,528 26	
Gross premiums on marine time risks, \$95,258 04; unearned premium, 50 per cent.....			47,629 02	
				724,615 23
Commissions and brokerage due and to become due.....				19,335 17
Marine bills payable.....				8,140 52
Agents balances.....				13,985 68
Total liabilities, except capital stock.....				\$835,060 13
Surplus as regards policy holders.....				\$1,479,716 18
Capital stock paid up in cash.....				1,000,000 00
Surplus over paid up capital, and all other liabilities.....				\$479,716 18
INCOME.				
		Fire.	Marine.	
Net cash received for premiums.....		\$950,344 53	\$164,792 70	\$1,115,137 23
Received for interest on mortgages and collateral loans.....				39,441 94
Received for interest and dividends on stocks and bonds.....				43,457 06
Received for rents.....				20,438 22
Total cash income.....				\$1,218,474 45
EXPENDITURES.				
		Fire.	Marine.	
Paid for losses, including \$95,819 58 losses in previous years.....		\$529,283 84	\$82,637 61	\$611,921 45
Cash dividends paid stockholders.....				120,000 00
Paid for commissions and brokerage.....				147,561 98
Salaries, fees, and all other charges of officers, clerks, agents, and all other employés.....				104,577 37
Paid for taxes.....				16,107 21
All other payments and expenditures.....				112,758 24
Total expenditures in cash.....				\$1,112,926 25

FIREMAN'S FUND INSURANCE COMPANY—Continued.

RISKS AND PREMIUMS.

	Fire Risks.	Premiums thereon.	Marine and Inland Risks.	Premiums thereon.
In force on December 31 of the preceding year	\$90,187,839 00	\$1,253,084 65	\$2,290,586 00	\$149,266 22
Written during the year	95,016,180 89	1,290,389 86	16,141,219 00	322,155 11
Totals	\$185,204,019 89	\$2,543,474 51	\$18,431,805 00	\$471,421 33
Deduct expirations and cancellations	82,720,131 89	1,136,210 49	15,645,431 00	292,392 89
In force at the end of the year	\$102,483,888 00	\$1,407,264 02	\$2,786,374 00	\$179,028 44
Deduct amount reinsured....	7,175,821 00	142,043 77	1,156,332 00	74,242 14
Net amount in force	\$95,308,067 00	\$1,265,220 25	\$1,630,042 00	\$104,786 30

HOME MUTUAL INSURANCE COMPANY.

LOCATED AT SAN FRANCISCO—ORGANIZED SEPTEMBER, 1864.

J. F. HOUGHTON, President.

CHARLES R. STORY, Secretary.

Joint stock capital authorized	\$300,000 00
Joint stock capital paid up in cash	300,000 00

YEAR ENDING DECEMBER 31, 1888.

ASSETS.			
Value of real estate owned by the company			\$137,000 00
Loans on mortgages (first liens) upon which not more than one year's interest is due			327,173 60
Interest due and accrued on said mortgage loans			4,99 064
Stocks and bonds owned absolutely by the company:	Par Value.	Market Value.	
20 Riverside Water Company bonds	\$20,000 00	\$20,600 00	
5 Portland, Oregon, school bonds	50,000 00	51,000 00	
10 Prospect School District bonds, San Bernardino County	10,000 00	10,600 00	
5 Crafton School District bonds, San Bernardino County	6,500 00	6,890 00	
4 San Pascual School District bonds, Los Angeles Co.	25,000 00	26,000 00	
5 Pasadena School District bonds, Los Angeles Co.	5,000 00	2,500 00	
2 Centralia School District bonds, Los Angeles Co.	2,000 00	2,080 00	
300 shares Pacific Gas Improvement Company stock	30,000 00	19,500 00	
200 shares Sather Banking Company stock	20,000 00	22,000 00	
	\$168,500 00	\$163,870 00	163,870 00
Stocks hypothecated to the company as collateral security for cash loaned by the company:	Par Value.	Market Value.	Amt. Loaned.
225 shares Merced Security Savings Bank stock	\$22,500 00	\$5,825 00	\$4,000 00
425 shares Commercial and Savings Bank of San José stock	42,500 00	25,500 00	20,500 00
500 shares San José and Santa Clara Railroad stock	50,000 00	10,000 00	
7,000 shares Paul O. Burns Wine Company stock	7,000 00	5,600 00	3,500 00
	\$122,000 00	\$46,925 00	\$28,000 00
Amount carried forward			\$661,034 24

HOME MUTUAL INSURANCE COMPANY—Continued.

Amount bought forward.....		\$661,034 24
Cash in office and in banks.....		90,626 39
Interest due and accrued on stocks and bonds, not included in "Market Value".....		5,650 00
Interest due and accrued on collateral loans.....		54 45
Gross premiums in course of collection.....		85,798 62
Total.....		\$843,163 70
LIABILITIES.		
Losses adjusted and unpaid.....	\$300 00	
Losses in process of adjustment.....	425 00	
Losses resisted.....	2,400 00	
Total.....	\$3,125 00	
Deduct reinsurance thereon.....	2,000 00	
		\$1,125 00
Gross premiums on fire risks running one year or less, \$233,437 97; unearned premium, 50 per cent.....	\$116,718 98	
Gross premiums on fire risks running more than one year, \$234,445 57; unearned premium, pro rata.....	121,637 76	
		238,356 74
Cash dividends remaining unpaid.....		1,136 00
Commissions and brokerage due and to become due.....		15,014 62
Total liabilities, except capital stock.....		\$255,632 36
Surplus as regards policy holders.....		\$587,531 34
Capital stock paid up in cash.....		300,000 00
Surplus over paid up capital and all other liabilities.....		\$287,531 34
INCOME.		
Net cash received for premiums.....		\$319,871 15
Received for interest on mortgages.....		28,721 61
Received for interest and dividends on stocks and bonds and collateral loans.....		9,961 33
Received for rents.....		3,053 75
Received for profit on sale of real estate.....		9,500 00
Total cash income.....		\$371,107 84
EXPENDITURES.		
Paid for losses, including \$5,889, losses in previous years.....		\$173,678 60
Cash dividends paid stockholders.....		36,000 00
Paid for commissions and brokerage.....		78,803 64
Salaries, fees, and all other charges of officers, clerks, agents, and all other employes.....		38,715 00
Paid for taxes.....		6,577 48
All other payments and expenditures.....		43,624 53
Total expenditures, in cash.....		\$377,399 25

RISKS AND PREMIUMS.

	Fire Risks.	Premiums thereon.
In force on December 31, of the preceding year.....	\$25,177,811 00	\$445,778 90
Written during the year.....	21,932,896 00	405,603 58
Totals.....	\$47,110,707 00	\$851,382 48
Deduct expirations and cancellations.....	20,186,250 00	356,502 70
In force at the end of the year.....	\$26,924,457 00	\$494,879 78
Deduct amount reinsured.....	1,440,695 00	26,996 24
Net amount in force.....	\$25,483,762 00	\$467,883 54

OAKLAND HOME INSURANCE COMPANY.

LOCATED AT OAKLAND, CALIFORNIA—ORGANIZED JANUARY, 1880.

WM. P. JONES, President.

WM. F. BLOOD, Secretary.

Joint stock capital authorized.....	\$200,000 00
Joint stock capital paid up in cash	200,000 00

YEAR ENDING DECEMBER 31, 1888.

ASSETS.			
Value of real estate owned by the company			\$93,000 00
Loans on mortgages (first liens) upon which not more than one year's interest is due			98,625 00
Loans on mortgages (first liens) upon which more than one year's interest is due			1,431 62
Interest due and accrued on said mortgage loans			1,295 08
Bonds owned absolutely by the company:			
	Par Value.	Market Value.	
United States bonds, registered $4\frac{1}{2}$ per cent.....	\$20,000 00	\$21,675 00	
Multnomah County, Oregon, school bonds.....	10,000 00	10,250 00	
Baker County, Oregon, school bonds.....	20,000 00	20,500 00	
			52,425 00
Cash in office and in banks			58,586 09
Interest due and accrued on bonds not included in "Market Value"			883 33
Gross premiums in due course of collection			88,621 86
Due from other companies for reinsurance, premiums, and brokerage.....			19,814 37
Total			\$414,682 95
LIABILITIES.			
Losses adjusted and unpaid.....		\$8,552 33	
Losses in process of adjustment.....		15,753 14	
Losses resisted.....		5,323 94	
Total		\$29,629 41	
Deduct reinsurance thereon		8,040 98	
			\$21,588 43
Gross premiums on fire risks running one year or less, \$172,334 65; unearned premium, 50 per cent		\$86,167 32	
Gross premiums on fire risks running more than one year, \$75,012 57; unearned premium, pro rata.....		43,076 02	
			129,243 34
Cash dividends remaining unpaid.....			766 16
Commissions and brokerage due and to become due			6,160 85
Due other companies for reinsurance and premiums			3,852 14
Total liabilities, except capital stock.....			\$161,610 92
Surplus as regards policy holders			\$253,072 03
Capital stock paid up in cash			200,000 00
Surplus over paid up capital and all other liabilities			\$53,072 03
INCOME.			
Net cash received for premiums			\$289,582 96
Received for interest on mortgages			8,867 31
Received for interest on bonds			1,850 00
Received for rents			5,213 95
Received for premiums on United States bonds sold			2,050 00
Total cash income			\$307,504 22

REPORT OF THE INSURANCE COMMISSIONER.

OAKLAND HOME INSURANCE COMPANY—Continued.

EXPENDITURES.	
Paid for losses, including \$17,224 85, losses in previous years	\$135,083 08
Cash dividends paid stockholders	15,666 67
Paid for commissions and brokerage	56,721 72
Salaries, fees, and all other charges of officers, clerks, agents, and all other employes	24,699 68
Paid for taxes	5,609 28
All other payments and expenditures	36,614 07
Total expenditures	\$274,394 50

RISKS AND PREMIUMS.

	Fire Risks.	Premiums thereon.
In force on December 31 of the preceding year	\$12,467,495 00	\$209,053 13
Written during the year	22,775,386 00	404,637 00
Totals	\$35,242,881 00	\$613,690 13
Deduct expirations and cancellations	17,963,420 00	318,088 75
In force at the end of the year	\$17,279,461 00	\$295,601 38
Deduct amount reinsured	2,382,960 00	48,224 16
Net amount in force	\$14,896,501 00	\$247,377 22

SOUTHERN CALIFORNIA INSURANCE COMPANY.

LOCATED AT LOS ANGELES, CALIFORNIA—ORGANIZED FEBRUARY, 1885.

E. F. SPENCE, President.

D. E. MILES, Secretary.

Joint stock capital authorized	\$200,000 00
Joint stock capital paid up in cash	200,000 00

YEAR ENDING DECEMBER 31, 1888.

ASSETS.	
Value of real estate owned by the company	\$85,479 34
Loans on mortgages (first liens) upon which not more than one year's interest is due	138,503 33
Interest due and accrued on said mortgage loans	5,835 24
Cash in office and in banks	38,848 32
Gross premiums in due course of collection	44,164 01
Bills receivable, <i>not matured</i> , taken for fire, marine, and inland risks	476 20
Due from other companies for reinsurance on losses already paid	288 36
Total	\$313,594 80
LIABILITIES.	
Losses adjusted and unpaid	\$9,014 56
Losses in process of adjustment	1,051 00
Losses resisted	1,487 40
Total	\$11,552 96
Deduct reinsurance thereon	2,104 87
	\$9,448 09
Amount carried forward	\$9,448 09

SOUTHERN CALIFORNIA INSURANCE COMPANY—Continued.

Amount brought forward.....		\$9,448 09
Gross premiums on fire risks running one year or less, \$107,- 937 33; unearned premium, 50 per cent.....	\$53,968 66	
Gross premiums on fire risks running more than one year, \$43,- 634 66; unearned premium, pro rata.....	26,224 26	
		80,192 92
Due and accrued for salaries, rent, etc.....		705 05
Commissions and brokerage due and to become due.....		5,624 22
Due for reinsurance.....		1,226 62
Total liabilities, except capital stock.....		\$97,196 90
Surplus as regards policy holders.....		\$216,397 90
Capital stock paid up in cash.....		200,000 00
Surplus over paid up capital and all other liabilities.....		\$16,397 90
INCOME.		
Net cash received for premiums.....		\$128,783 61
Received for interest on mortgages.....		15,426 03
Received for rents.....		3,926 98
Total cash income.....		\$148,136 62
EXPENDITURES.		
Paid for losses, including \$2,527 74 losses in previous years.....		\$62,412 35
Cash dividends paid stockholders.....		12,000 00
Paid for commissions and brokerage.....		29,490 56
Salaries, fees, and all other charges of officers, clerks, agents, and all other employees.....		12,700 75
Paid for taxes.....		1,615 15
All other payments and expenditures.....		13,159 93
Total expenditures.....		\$131,378 74

RISKS AND PREMIUMS.

	Fire Risks.	Premiums thereon.
In force on December 31 of the preceding year.....	\$7,818,278 00	\$127,858 70
Written during the year.....	11,215,651 00	194,941 66
Totals.....	\$19,033,929 00	\$322,800 36
Deduct expirations and cancellations.....	8,840,500 00	141,808 11
In force at the end of the year.....	\$10,193,429 00	\$180,992 25
Deduct amount reinsured.....	1,452,385 00	29,420 26
Net amount in force.....	\$8,741,044 00	\$151,571 99

STATE INVESTMENT AND INSURANCE COMPANY.

LOCATED AT SAN FRANCISCO—ORGANIZED DECEMBER, 1871.

GEORGE L. BRANDER, President.

CHARLES H. CUSHING, Secretary.

Joint stock capital authorized\$400,000 00
 Joint stock capital paid up in cash 400,000 00

YEAR ENDING DECEMBER 31, 1888.

ASSETS.			
Value of real estate owned by the company.....			\$138,765 12
Loans on mortgages (first liens) upon which not more than one year's interest is due			211,800 00
Interest due and accrued on said mortgage loans			1,739 87
Stocks and bonds owned absolutely by the company:			
	Par Value.	Market Value.	
United States bonds, 4 per cent.....	\$50,000 00	\$64,000 00	
Dakin Publishing Company stock.....	2,500 00	750 00	
	\$52,500 00	\$64,750 00	64,750 00
Stock hypothecated to the company as collateral security for cash loaned by the company:			
	Par Value.	Market Value.	Amt. Loaned.
30 shares California Savings and Loan Society.....	\$3,000 00	\$3,750 00	\$3,023 22
Cash in office and in banks.....			49,887 80
Interest due and accrued on bonds, not included in "Market Value".....			500 00
Interest due and accrued on collateral loans			8 79
Gross premiums in due course of collection			63,867 70
Rents due and accrued			85 00
Total			\$534,427 50
LIABILITIES.			
Losses in process of adjustment		\$3,917 13	
Losses resisted.....		1,800 00	
			\$5,717 13
Gross premiums on fire risks running one year or less, \$188,485 25; unearned premium		\$94,242 62	
Gross premiums on fire risks running more than one year, \$52,725 57; unearned premium, pro rata.....		26,663 46	
			120,906 08
Cash dividends remaining unpaid.....			976 00
Commissions and brokerage due and to become due			3,802 06
Total liabilities, except capital stock.....			\$131,401 27
Surplus as regards policy holders			\$403,026 23
Capital stock paid up in cash.....			400,000 00
Surplus over paid up capital and all other liabilities			\$3,026 23
INCOME.			
Net cash received for premiums.....			\$214,498 59
Received for interest on mortgages			14,384 52
Received for interest on bonds			1,769 01
Received for rents			10,185 20
Total cash income			\$240,837 32
EXPENDITURES.			
Paid for losses, including \$5,007 losses in previous years			\$110,337 60
Cash dividends paid stockholders.....			20,717 00
Paid for commissions and brokerage			44,531 04
Salaries, fees, and all other charges of officers, clerks, agents, and employes			25,770 00
Paid for taxes.....			4,774 51
All other payments and expenditures.....			21,508 65
Total expenditures.....			\$227,638 80

STATE INVESTMENT AND INSURANCE COMPANY—Continued.

RISKS AND PREMIUMS.

	Fire Risks.	Premiums thereon.
In force on December 31 of the preceding year	\$14,060,677 00	\$246,189 93
Written during the year	14,110,554 00	250,943 13
Totals	\$28,171,231 00	\$497,133 06
Deduct expirations and cancellations	12,910,186 00	233,372 35
In force at the end of the year	\$15,261,045 00	\$263,760 71
Deduct amount reinsured	1,143,430 00	22,549 89
Net amount in force	\$14,117,615 00	\$241,210 82

SUN INSURANCE COMPANY.

LOCATED AT SAN FRANCISCO—ORGANIZED FEBRUARY, 1882.

C. L. TAYLOR, President.

E. E. POTTER, Secretary.

Joint stock capital authorized	\$300,000 00
Joint stock capital paid up in cash	300,000 00

YEAR ENDING DECEMBER 31, 1888.

ASSETS.			
Value of real estate owned by the company			\$90,000 00
Loans on mortgages (first liens) upon which not more than one year's interest is due			257,205 00
Loans on mortgages (first liens) upon which more than one year's interest is due			2,000 00
Interest due and accrued on said mortgage loans			4,162 57
Bonds owned absolutely by the company:	Par Value.	Market Value.	
Stockton bonds, 6 per cent	\$35,000 00	\$36,187 00	
Portland, Oregon, bonds, 5 per cent	23,500 00	23,963 70	
Forest Grove, Oregon, bonds, 8 per cent	4,500 00	5,245 60	
Newport, Oregon, bonds, 8 per cent	2,000 00	2,130 25	
Multnomah, Oregon, bonds, 8 per cent	20,000 00	20,588 93	
Cash in office and in banks			88,115 48
Interest due and accrued on bonds, not included in "Market Value"			15,260 85
Gross premiums in due course of collection			1,844 57
Bills receivable, not matured, taken for fire, marine, and inland risks			57,222 87
Due from other companies for reinsurance on losses already paid			27,928 15
			7,116 98
Total			\$550,856 47
LIABILITIES.			
Losses adjusted and unpaid	\$13,400 60		
Losses in process of adjustment	5,245 90		
Losses resisted	1,000 00		
			\$19,646 50
Gross premiums on fire risks running one year or less, \$148,578 21; unearned premium, 50 per cent	\$74,382 60		
Gross premiums on fire risks running more than one year, \$74,835 54; unearned premium, pro rata	41,100 93		
Gross premiums on marine and inland navigation risks, \$3,696 26; unearned premium, 100 per cent	3,696 26		
Gross premiums on marine time risks, \$68,461 88; unearned premium, 50 per cent	34,230 94		
			153,410 73
Amount carried forward			\$173,057 23

REPORT OF THE INSURANCE COMMISSIONER.

SUN INSURANCE COMPANY--Continued.

Amount brought forward.....				\$173,057 23
Commissions and brokerage due and to become due.....				13,926 65
Total liabilities except capital stock.....				\$186,983 88
Surplus as regards policy holders.....				\$363,872 59
Capital stock paid up in cash.....				300,000 00
Surplus over paid up capital and all other liabilities.....				\$63,872 59
INCOME.				
		Fire.	Marine.	
Net cash received for premiums.....	\$174,749 76	\$97,955 95		\$272,705 71
Received for interest on mortgages.....				16,632 44
Received for interest on bonds.....				5,267 05
Received for rents.....				5,550 00
Sundries.....				145 64
Total cash income.....				\$300,300 84
EXPENDITURES.				
		Fire.	Marine.	
Paid for losses, including \$11,670 43, losses in previous years.....	\$97,604 59	\$60,568 70		\$158,173 29
Cash dividends paid stockholders.....				30,000 00
Paid for commissions and brokerage.....				44,341 62
Salaries, fees, and all other charges of officers, clerks, agents, and all other employes.....				26,399 43
Paid for taxes.....				2,815 38
All other payments and expenditures.....				20,589 01
Total expenditures.....				\$282,318 73

RISKS AND PREMIUMS.

	Fire Risks.	Premiums thereon.	Marine and Inland Risks.	Premiums thereon.
In force on December 31 of the preceding year.....	\$14,208,065 00	\$205,867 62	\$796,478 00	\$54,129 28
Written during the year.....	19,154,644 00	261,610 55	4,738,022 00	159,719 97
Totals.....	\$33,362,709 00	\$467,478 17	\$5,534,500 00	\$213,849 25
Deduct expirations and cancellations.....	14,839,155 00	207,736 17	3,252,539 00	90,798 33
In force at the end of the year.....	\$18,523,554 00	\$259,742 00	\$2,281,961 00	\$123,050 92
Deduct amount reinsured.....	2,816,942 00	36,328 25	1,127,757 00	50,892 78
Net amount in force.....	\$15,706,612 00	\$223,413 75	\$1,154,204 00	\$72,158 14

UNION INSURANCE COMPANY.

LOCATED AT SAN FRANCISCO—ORGANIZED APRIL, 1865.

NATHANIEL T. JAMES, President.

JAMES D. BAILEY, Secretary.

Joint stock capital authorized.....\$750,000 00
 Joint stock capital paid up in cash.....750,000 00

YEAR ENDING DECEMBER 31, 1888.

ASSETS.

Value of real estate owned by the company				\$115,000 00
Loans on mortgages (first liens) upon which not more than one year's interest is due				198,550 00
Interest due on said mortgage loans				783 00
Bonds and stocks owned by the company:				
	Par Value.	Market Value.		
United States bonds, 4 per cent	\$200,000 00	\$254,000 00		
Oakland City bonds	8,000 00	10,000 00		
Alameda Town bonds	4,000 00	4,250 00		
Montgomery Avenue bonds, San Francisco	120,000 00	36,000 00		
Burlington, Cedar Rapids, and Northern Railroad first mortgage bonds	23,000 00	21,064 00		
Chicago, Burlington, and Quincy Railroad first mortgage bonds	25,000 00	32,437 50		
Chicago and Northwestern Railroad consolidated Sinking Fund bonds	35,000 00	49,466 65		
Chicago, St. Paul, Minneapolis, and Omaha Railroad consolidated mortgage bonds	25,000 00	29,687 50		
Chicago, Milwaukee, and St. Paul Railroad (terminal) mortgage bonds	25,000 00	25,250 00		
Chicago, Rock Island, and Pacific Railroad extension and collateral bonds	25,000 00	26,187 50		
Chicago, Rock Island, and Pacific Railroad first mortgage bonds	20,000 00	26,150 00		
Delaware, Lackawanna, and Western Railroad first mortgage bonds	2,000 00	2,713 35		
Lake Shore and Michigan Southern Railroad consolidated mortgage bonds	25,000 00	31,500 00		
Michigan Central Railroad first mortgage bonds	25,000 00	32,333 00		
Metropolitan Elevated Railroad (N. Y. C.) first mortgage bonds	15,000 00	16,800 00		
New York Central and Hudson Railroad first mortgage bonds	35,000 00	46,637 50		
Market Street Cable Railroad (San Francisco) bonds	50,000 00	61,750 00		
Powell Street Cable Railroad (San Francisco) bonds	25,000 00	27,500 00		
Spring Valley Waterworks (San Francisco) bonds	20,000 00	24,500 00		
Spring Valley Waterworks (San Francisco) stock	22,500 00	22,613 00		
	\$729,500 00	\$780,840 00		780,840 00
Stocks hypothecated to the company, as collateral security, for cash loaned by the company:				
	Par Value.	Market Value.	Amt. Loaned.	
200 shares London, Paris, and American Bank stock	\$20,000 00	\$20,200 00	\$15,000 00	
100 shares Union Savings Bank (Oakland) stock	10,000 00	12,500 00	8,000 00	
	\$30,000 00	\$32,700 00	\$23,000 00	23,000 00
Cash in office and in banks				49,680 06
Interest due and accrued on stocks and bonds, not included in "Market Value"				11,623 00
Gross premiums in due course of collection				99,028 49
Bills receivable, <i>not matured</i> , taken for fire, marine, and inland risks				40,558 73
Total				\$1,319,063 28

UNION INSURANCE COMPANY—Continued.

LIABILITIES.			
Losses adjusted and unpaid.....	\$22,212	40	
Losses in process of adjustment	41,128	45	
Losses resisted.....	12,888	87	
			\$76,229 72
Gross premiums on fire risks, running one year or less, \$417,- 189 40; unearned premium, 50 per cent.....	\$208,594	70	
Gross premiums on fire risks, running more than one year, \$162,362 28; unearned premium, pro rata.....	96,961	53	
Gross premiums on marine and inland navigation risks, \$8,- 780 88; unearned premium, 100 per cent.....	8,780	88	
Gross premiums on marine time risks, \$63,285 13; unearned premium, 50 per cent.....	31,642	56	
			345,979 67
Unused balances of notes taken in advance for premiums on open marine policies.....			14,140 56
Due and accrued for salaries, rent, etc.....			3,715 60
Commissions and brokerage due and to become due.....			2,416 67
Total liabilities, except capital stock			\$442,482 22
Surplus as regards policy holders.....			\$876,581 06
Joint stock capital paid up in cash.....			750,000 00
Surplus over paid up capital and all other liabilities			\$126,581 06
INCOME.			
	Fire.	Marine.	
Net cash received for premiums.....	\$565,701 14	\$128,854 32	\$694,555 46
Received for interest on mortgages.....			11,794 06
Received for interest and dividends on stocks and bonds and collateral loans.....			21,832 52
Received for rents.....			8,461 10
Total cash income			\$736,643 14
EXPENDITURES.			
	Fire.	Marine.	
Paid for losses, including \$46,311, losses in previ- ous years.....	\$312,861 22	\$70,390 37	\$383,251 59
Cash dividends paid stockholders.....			30,000 00
Paid for commissions and brokerage.....			169,181 22
Salaries, fees, and all other charges of officers, clerks, agents, and all other employés.....			42,340 92
Paid for taxes.....			15,604 03
All other payments and expenditures			39,439 14
Total expenditures.....			\$679,816 90

RISKS AND PREMIUMS.

	Fire Risks.	Premiums thereon.	Marine and In- land Risks.	Premiums thereon.
In force on December 31 of the preceding year.....	\$40,301,147 00	\$482,661 31	\$1,510,776 00	\$73,931 00
Written during the year.....	54,256,418 00	727,287 66	15,780,522 00	238,645 48
Totals.....	\$94,557,565 00	\$1,209,948 97	\$17,291,298 00	\$312,576 48
Deduct expirations and can- cancellations	46,342,619 00	598,576 86	15,529,722 00	213,880 79
In force at the end of the year.....	\$48,214,946 00	\$611,372 11	\$1,761,576 00	\$98,695 69
Deduct amount reinsured	2,429,819 00	31,820 43	569,282 00	26,629 68
Net amount in force	\$45,785,127 00	\$579,551 68	\$1,192,294 00	\$72,066 01

PACIFIC MUTUAL LIFE INSURANCE COMPANY.

LOCATED AT SAN FRANCISCO—ORGANIZED DECEMBER, 1867.

GEORGE A. MOORE, President.

J. N. PATTON, Secretary.

Joint stock capital paid up in cash.....\$100,000 00

YEAR ENDING DECEMBER 31, 1888.

INCOME.		
Received for premiums for first year's insurance	{ Accident... \$198,928 20	
	{ Life..... 61,261 19	
Received for premiums for subsequent year's insurance	324,769 76	
Total	\$584,959 15	
Deduct amount paid for reinsurance.....	3,131 13	
Total premium income.....	\$581,828 02	\$581,828 02
Received for interest on mortgage loans		101,110 49
Received for interest and dividends on bonds and stocks.....		4,612 50
Received for interest on premium notes.....		3,284 45
Received for interest on other debts due the company		6,909 69
Received for rents		1,708 80
Total income		\$699,453 95
DISBURSEMENTS.		
Paid for losses and additions	{ Accident..... \$78,875 59	
	{ Life..... 114,370 32	
Paid for matured endowments and additions	27,286 08	
Total	\$220,531 99	
Deduct amount received on reinsurance	364 28	
		\$220,167 71
Paid to annuitants		3,275 75
Paid for surrendered policies		49,532 85
Paid for dividends to policy holders		32,508 97
Paid for dividends to stockholders		10,000 00
Paid for commissions to agents		88,426 05
Paid for salaries and traveling expenses of agents.....		20,109 16
Paid for medical examiners' fees		5,277 70
Paid for office salaries.....		32,218 27
Paid for taxes.....		3,391 44
Paid for rent.....		4,831 64
Paid for advertising.....		3,636 05
Paid for printing and stationery		6,185 66
Paid for legal fees.....		3,389 76
Paid for general expense.....		6,801 15
Total disbursements		\$489,752 16
ASSETS.		
Value of real estate owned by the company		\$114,565 40
Loans on mortgages (first liens) on real estate		1,431,365 58
Loans secured by pledge of bonds, stocks, or other marketable collaterals..		1,711 94
Premium notes on policies in force		52,576 98
Cash loans to policy holders on this company's policies assigned as collateral		25,167 34
Cash value of stocks and bonds owned by the company		23,700 00
Cash in office and in banks		97,107 91
Interest due and accrued on mortgage loans.....		52,846 30
Interest accrued on stocks and bonds.....		345 00
Interest due on collateral loans		1,472 13
Interest due and accrued on premium notes		8,745 21
Gross premiums due and unreported on policies in force Decem- ber 31, 1888.....	\$167,775 85	
Gross deferred premiums on policies in force December 31, 1888	20,831 00	
Total	\$188,606 85	
Deduct loading on above gross amount	43,780 37	
		\$144,826 48
Total admitted assets		\$1,954,448 27

PACIFIC MUTUAL LIFE INSURANCE COMPANY—Continued.

LIABILITIES.		
Claims for death losses and matured endowments in process of adjustment	\$4,187 00	
Claims for death losses resisted	5,000 00	\$9,187 00
Net present value of all outstanding policies in force on December 31, 1888, computed according to the American Table of Mortality, with $\frac{1}{2}$ per cent interest		1,555,328 00
Reserve on accident policies in force on December 31, 1888		127,643 00
Total liabilities		\$1,692,158 00
Surplus as regards policy holders		\$262,290 27
PREMIUM NOTE ACCOUNT.		
Premium notes on hand December 31, 1887	\$48,807 40	
Premium notes received during the year	38,968 28	
Total		\$87,775 68
Premium notes used in payment of losses and claims	\$404 67	
Premium notes used in purchase of surrendered policies	2,582 26	
Premium notes used in payment of dividends to policy holders	967 07	
Premium notes used in payment of matured endowments	325 00	
Premium notes redeemed by maker in cash	30,919 70	
Total reduction of premium note account		35,198 70
Balance of premium notes at the end of the year		\$52,576 98

EXHIBIT OF POLICIES.

	WHOLE LIFE POLICIES.		ENDOWMENT POLICIES.		ALL OTHER POLICIES.		TOTAL NUMBERS AND AMOUNTS.	
	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.
In force on December 31, 1887	2,736	\$7,063,627	390	\$940,267	187	\$425,900	3,313	\$8,429,794
New policies issued	575	1,666,116	150	515,406			725	2,181,522
Old policies revived	5	18,000	1	1,000	1	2,000	7	21,000
Old policies increased				17,193		1,003		18,196
Additions		11,800		2,332				14,132
Totals	3,316	\$8,759,543	541	\$1,476,198	188	\$428,903	4,045	\$10,664,644
Deduct policies ceased to be in force:								
By death	38	\$92,079	5	\$9,194	5	\$11,000	48	\$112,273
By maturity			11	22,600			11	22,600
By expiry					7	23,000	7	23,000
By surrender	43	130,600	13	35,000	2	5,103	58	170,703
By lapse	165	407,500	30	54,700	4	23,000	199	485,200
By change and decrease		1,000		2,500				3,500
Not taken	50	141,480	15	33,000			65	174,480
Total terminated	296	\$772,659	74	\$156,994	18	\$62,103	388	\$991,756
Net numbers and amounts in force at the end of the year	3,020	\$7,986,884	467	\$1,319,204	170	\$366,800	3,657	\$9,672,888
Policies reinsured	2	\$28,471					2	\$28,471

PACIFIC SURETY COMPANY.

LOCATED AT SAN FRANCISCO—ORGANIZED MAY, 1885.

WALLACE EVERSON, President.

A. P. REDDING, Secretary.

Joint stock capital authorized	\$100,000 00
Joint stock capital paid up in cash	100,000 00

YEAR ENDING DECEMBER 31, 1888.

ASSETS.				
Loans on mortgages (first liens) upon which not more than one year's interest is due				\$93,850 00
Interest due and accrued on said mortgage loans				2,409 15
Cash in office and in banks				34,232 56
Interest due and accrued on savings bank deposits				986 63
Gross premiums in due course of collection				5,305 92
Total				\$136,784 26
LIABILITIES.				
Losses in process of adjustment				\$2,819 23
Gross premiums on guarantee risks running one year or less, \$19,039 15; unearned premium, 50 per cent		\$9,519 57		
Gross premiums on accident risks running one year or less, \$10,534 38; unearned premium, 50 per cent		5,267 19		14,786 76
Premiums paid in advance				2,893 55
Cash dividends remaining unpaid				55 00
Total liabilities except capital stock				\$20,554 54
Surplus as regards policy holders				\$116,229 72
Capital stock paid up in cash				100,000 00
Surplus over paid up capital and all other liabilities				\$16,229 72
INCOME.				
	Guarantee.	Accident.		
Net cash received for premiums	\$17,825 44	\$10,727 12		\$28,552 56
Received for interest on mortgages				7,209 12
Received for interest on savings bank deposits				661 51
Received for rents				120 00
Total cash income				\$36,543 19
EXPENDITURES.				
Paid for losses, including \$3,252 46, losses in previous years				\$6,052 14
Cash dividends paid stockholders				7,945 00
Paid for commissions and brokerage				3,633 29
Salaries, fees, and all other charges of officers, clerks, agents, and all other employés				8,132 41
Paid for taxes				1,491 74
All other payments and expenditures				4,450 91
Total expenditures				\$31,705 49

PACIFIC SURETY COMPANY—Continued.

RISKS AND PREMIUMS.

	Guarantee Risks.	Premiums thereon.	Accident Risks.	Premiums thereon.
In force on December 31 of the preceding year.....	\$2,302,290 00	\$16,920 81	\$1,433,500 00	\$10,333 90
Written during the year	3,162,795 00	21,795 80	2,126,000 00	12,272 40
Totals	\$5,465,085 00	\$38,716 61	\$3,559,500 00	\$22,606 30
Deduct expirations and cancellations	2,736,190 00	19,677 46	1,746,500 00	11,968 57
In force at the end of the year ..	\$2,728,895 00	\$19,039 15	\$1,813,000 00	\$10,637 73
Deduct amount reinsured			22,500 00	103 35
Net amount in force	\$2,728,895 00	\$19,039 15	\$1,790,500 00	\$10,534 38

CALIFORNIA TITLE INSURANCE AND TRUST COMPANY.

LOCATED AT SAN FRANCISCO—ORGANIZED FEBRUARY, 1886.

GEORGE T. MARYE, JR., President.

MILTON B. CLAPP, Secretary.

Joint stock capital authorized	\$250,000 00
Joint stock capital paid up in cash	250,000 00

YEAR ENDING DECEMBER 31, 1888.

ASSETS.	
Value of real estate owned by the company.....	\$14,272 67
Loans on mortgages (first liens) upon which not more than one year's interest is due	108,553 50
Cash in office and in banks	13,696 30
Plant	124,998 51
Total	\$261,520 98
LIABILITIES.	
Capital stock paid up in cash	\$250,000 00
Net surplus	11,520 98
Total	\$261,520 98
INCOME.	
Net cash received for premiums	\$24,466 75
Received for interest on mortgages	7,560 95
Received for rents	2,141 75
Total	\$34,169 45
EXPENDITURES.	
Paid for commissions and brokerage	\$1,111 20
Salaries, fees, and all other charges of officers, clerks, agents, and all other employes	20,231 95
Paid for taxes	1,972 03
All other payments and expenditures	6,841 12
Total	\$30,156 30

TABLE No. 12.

Summary of Assets, Liabilities, Income, Expenditures, etc., of Fire and Marine Insurance Companies doing business in California on the thirty-first day of December, 1888—California Companies.

NAME.	Location.	Cash Capital Paid Up.	Assets.	Liabilities Capital not Included.	Income.	Expenditures.	Losses Incurred during the Year.	Net Surplus.
Alta Fire	Stockton	\$100,000 00	\$118,967 25	\$18,820 24	\$23,638 26	\$27,424 02	\$5,517 62	\$147 01
Anglo-Nevada	San Francisco	2,000,000 00	2,624,088 24	550,775 27	1,140,716 15	377,488 13	598,256 21	73,312 97
California	San Francisco	600,000 00	1,313,286 04	491,936 99	702,657 80	626,241 34	368,225 90	221,349 05
Commercial	San Francisco	200,000 00	450,086 70	201,361 52	438,958 69	435,610 25	267,121 68	48,725 18
Fireman's Fund	San Francisco	1,000,000 00	2,314,776 31	835,060 13	1,218,474 45	1,112,926 25	575,353 62	479,716 18
Home Mutual	San Francisco	300,000 00	843,163 70	255,632 36	371,107 84	377,399 25	168,653 80	287,531 34
Oakland Home	Oakland	200,000 00	414,682 95	161,610 92	307,564 22	274,394 50	141,420 53	53,072 03
Southern California	Los Angeles	200,000 00	313,594 80	97,196 90	148,136 62	131,378 74	67,427 54	16,397 90
State Investment	San Francisco	400,000 00	534,427 50	131,401 27	240,837 32	227,638 80	111,017 73	3,026 23
Sun	San Francisco	300,000 00	550,856 47	186,983 88	300,300 84	282,318 73	151,737 36	63,872 59
Union	San Francisco	750,000 00	1,319,003 28	442,482 22	736,643 14	679,816 90	402,026 37	126,581 06
Totals .....	.....	\$6,050,000 00	\$10,796,993 24	\$3,373,261 70	\$5,629,035 33	\$5,152,636 91	\$2,856,788 36	\$1,373,731 54

TABLE No. 13.

Showing the various items composing the Assets of Fire and Marine Insurance Companies doing business in California on the thirty-first day of December, 1888—
California Companies.

NAME.	Location.	Real Estate.	Loans on Bonds and Mortgages.	Stocks and Bonds Owned by the Company.	Loans on Stocks and other Securities and Collateral.	Cash in Office and Banks.
Alta Fire.....	Stockton.....	-----	\$74,825 00	\$4,100 00	-----	\$17,586 41
Anglo-Nevada.....	San Francisco.....	-----	1,021,807 55	972,030 55	-----	81,800 89
California.....	San Francisco.....	-----	21,386 32	663,415 00	-----	344,080 65
Commercial.....	San Francisco.....	\$101,000 00	174,650 00	144,791 25	-----	25,026 82
Fireman's Fund.....	San Francisco.....	300,000 00	277,200 00	966,540 00	10,000 00	133,136 24
Home Mutual.....	San Francisco.....	137,000 00	327,173 60	163,870 00	351,550 00	90,026 39
Oakland Home.....	Oakland.....	93,000 00	100,056 62	52,425 00	28,000 00	58,586 09
Southern California.....	Los Angeles.....	85,479 34	138,503 33	-----	-----	38,848 32
State Investment.....	San Francisco.....	138,765 12	211,800 00	64,750 00	3,023 22	49,887 80
Sum.....	San Francisco.....	90,000 00	259,205 00	88,115 48	-----	15,200 85
Union.....	San Francisco.....	115,000 00	198,550 00	780,840 00	23,000 00	49,680 06
Totals.....	-----	\$1,068,275 26	\$2,805,157 42	\$3,900,877 28	\$791,360 72	\$904,580 52
NAME.	Location.	Interest Due and Accrued.	Premiums in Course of Collection.	Bills Receivable not Matured, taken for Marine and Inland Risks.	All other Assets.	Total Assets.
Alta Fire.....	Stockton.....	\$2,637 25	\$19,818 59	-----	-----	\$118,967 25
Anglo-Nevada.....	San Francisco.....	19,792 80	151,190 29	-----	-----	2,624,088 24
California.....	San Francisco.....	12,183 36	132,082 45	\$36,138 26	\$1,618 66	1,313,286 04
Commercial.....	San Francisco.....	1,905 91	84,415 02	4,266 90	-----	450,086 70
Fireman's Fund.....	San Francisco.....	17,808 33	200,362 56	65,772 54	2,406 64	2,314,776 31
Home Mutual.....	San Francisco.....	10,695 09	85,798 62	-----	-----	813,163 70
Oakland Home.....	Oakland.....	2,179 01	88,621 86	-----	19,814 37	414,682 95
Southern California.....	Los Angeles.....	5,835 24	44,164 01	476 20	288 36	313,594 80
State Investment.....	San Francisco.....	2,248 66	63,867 70	-----	85 00	534,427 50
Sum.....	San Francisco.....	6,007 14	57,222 87	27,928 15	7,116 98	550,856 47
Union.....	San Francisco.....	12,406 00	99,028 49	40,558 73	-----	1,319,063 28
Totals.....	-----	\$93,698 79	\$1,026,572 46	\$175,140 78	\$31,230 01	\$10,796,993 24

TABLE No. 14.

Showing the various items composing the Liabilities, except Capital Stock, of Five and Marine Insurance Companies doing business in California on the thirty-first day of December, 1888—California Companies.

NAME.	Location.	Losses Adjusted.	Losses Unadjusted.	Losses Resisted.	Cash Dividends Remaining Unpaid.	Fire Reinsurance.
Alta Fire	Stockton					\$18,325 69
Anglo-Nevada	San Francisco	\$13,270 44	\$39,308 29	\$750 00		471,282 32
California	San Francisco	18,970 00	71,500 92	4,100 00		301,546 13
Commercial	San Francisco		25,227 44			165,580 72
Fireman's Fund	San Francisco	13,159 31	43,099 22	12,725 00		667,457 94
Home Mutual	San Francisco	300 00	425 00	400 00	\$1,136 00	238,356 74
Oakland Home	Oakland	8,552 33	7,712 16	5,323 94	766 16	129,243 34
Southern California	Los Angeles	6,909 69	1,051 00	1,487 40		80,192 92
State Investment	San Francisco		3,917 13	1,800 00	976 00	120,906 08
Sum	San Francisco	13,400 60	5,245 90	1,000 00		115,483 53
Union	San Francisco	22,212 40	41,128 45	12,888 87		305,556 23
Totals		\$96,774 77	\$238,615 51	\$40,475 21	\$2,878 16	\$2,613,931 65
NAME.	Location.	Marine Reinsurance.	All other Claims.	Total Liabilities, Capital Stock not Included.	Net Surplus.	
Alta Fire	Stockton				\$147 01	
Anglo-Nevada	San Francisco	\$15,342 20	\$494 55	\$18,820 24	73,312 97	
California	San Francisco	78,734 10	17,085 84	550,775 27	221,349 05	
Commercial	San Francisco	7,214 04	3,339 32	491,936 99	48,725 18	
Fireman's Fund	San Francisco	57,157 28	41,461 37	201,361 52	479,716 18	
Home Mutual	San Francisco		15,014 62	835,040 13	287,531 34	
Oakland Home	Oakland		10,012 99	255,632 36	53,072 03	
Southern California	Los Angeles		7,555 89	161,610 92	16,397 90	
State Investment	San Francisco		3,802 06	97,496 90	3,026 23	
Sum	San Francisco	37,927 20	13,926 65	131,401 27	63,872 59	
Union	San Francisco	40,423 44	20,272 83	186,983 88	126,581 06	
Totals		\$236,798 26	\$143,788 14	442,482 22	\$1,373,731 54	

TABLE No. 15.

Showing the various items composing the Incomes of Fire and Marine Insurance Companies doing business in California on the thirty-first day of December, 1888—California Companies.

NAME.	Location.	Fire Premiums.	Marine and Inland Premiums.	Interest on Bonds and Mortgages.	Interest and Dividends from Other Sources.	Rents.	From all Other Sources.	Total Income.
Alta Fire.....	Stockton.....	\$23,256 71	---	---	\$381 55	---	---	\$23,638 26
Anglo-Nevada.....	San Francisco.....	932,661 63	\$99,861 84	\$63,159 87	45,032 81	---	---	1,140,716 15
California.....	San Francisco.....	469,128 53	194,100 47	1,457 54	35,846 26	\$1,125 00	\$1,000 00	702,657 80
Commercial.....	San Francisco.....	379,407 99	23,316 64	11,742 54	24,491 52	---	---	438,958 69
Fireman's Fund.....	San Francisco.....	950,344 53	164,792 70	39,441 94	43,457 05	20,438 22	---	1,218,474 45
Home Mutual.....	San Francisco.....	319,871 15	---	28,721 61	9,961 33	3,053 75	9,500 00	371,107 84
Oakland Home.....	Oakland.....	289,582 96	---	8,867 31	1,850 00	5,213 95	2,050 00	307,564 22
Southern California.....	Los Angeles.....	128,783 61	---	15,426 03	---	3,926 98	---	148,136 62
State Investment.....	San Francisco.....	214,498 59	---	14,384 52	1,769 01	10,185 20	---	240,837 32
Sun.....	San Francisco.....	174,749 76	97,955 95	16,032 44	5,267 05	5,550 00	---	300,300 84
Union.....	San Francisco.....	565,701 14	128,854 32	11,794 06	21,832 52	8,461 10	---	736,643 14
Totals.....	---	\$4,447,986 60	\$708,881 92	\$211,627 86	\$189,889 11	\$57,954 20	\$12,695 64	\$5,629,035 33

TABLE No. 16.

Showing the various items composing the Expenditures of Fire and Marine Insurance Companies doing business in California on the thirty-first day of December, 1888—California Companies.

NAME.	Location.	Fire Losses.	Marine Losses.	Dividends.	Commissions and Brokerage.	Office Salaries.	State and Local Taxes.	All Other Expenditures.	Total Expenditures.
Alta Fire.....	Stockton.....	\$5,517 62	---	---	\$5,667 89	\$7,315 26	---	\$8,923 25	\$27,494 02
Anglo-Nevada.....	San Francisco.....	505,954 02	\$80,127 34	---	221,388 62	54,789 38	\$10,660 71	104,567 46	977,488 13
California.....	San Francisco.....	226,241 87	89,590 43	\$72,000 00	120,046 49	45,900 36	13,447 00	59,015 19	626,241 34
Commercial.....	San Francisco.....	237,359 58	16,968 82	20,000 00	85,649 70	33,299 62	8,041 49	30,291 04	435,610 25
Fireman's Fund.....	San Francisco.....	529,283 84	82,637 61	120,000 00	147,561 98	104,577 37	16,107 21	112,758 24	1,112,926 25
Home Mutual.....	San Francisco.....	173,678 60	---	36,000 00	78,803 64	38,715 00	6,577 48	43,624 53	377,399 25
Oakland Home.....	Oakland.....	135,083 08	---	15,666 67	56,721 72	24,689 68	5,669 28	36,614 07	274,394 50
Southern California.....	Los Angeles.....	62,412 35	---	12,000 00	29,490 56	12,700 75	1,615 15	13,159 93	131,378 74
State Investment.....	San Francisco.....	110,337 60	---	20,717 00	44,531 04	25,770 00	4,774 51	21,508 65	227,638 80
Sun.....	San Francisco.....	97,604 89	60,568 70	30,000 00	44,341 62	26,399 43	2,815 38	20,589 01	282,318 73
Union.....	San Francisco.....	312,861 22	70,390 37	30,000 00	169,181 22	42,340 92	15,604 03	39,439 14	679,816 90
Totals.....	---	\$2,396,334 97	\$400,283 27	\$360,383 67	\$1,003,384 48	\$416,507 77	\$85,252 24	\$490,490 51	\$5,152,636 91

TABLE No. 17.

Showing amount of Risks Written, Premiums Received, and amount of Risks in Force, on the thirty-first day of December, 1888, with Premiums thereon, of Fire and Marine Insurance Companies doing business in California—California Companies.

NAME.	Location.	RISKS WRITTEN DURING THE YEAR.				Total Premiums.
		Fire.	Premiums.	Marine.	Premiums.	
Alta Fire	Stockton	\$3,042,547 00	\$52,954 75	---	---	\$52,954 75
Anglo-Nevada	San Francisco	75,152,714 00	1,305,170 51	\$18,057,904 00	\$127,483 60	1,432,654 11
California	San Francisco	42,599,880 00	590,036 24	14,706,843 00	300,876 61	890,912 85
Commercial	San Francisco	30,713,144 00	473,647 38	2,209,181 00	29,460 13	503,107 51
Fireman's Fund	San Francisco	95,016,181 00	1,290,389 86	16,141,219 00	322,155 11	1,612,544 97
Home Mutual	San Francisco	21,932,896 00	405,603 58	---	---	405,603 58
Oakland Home	Oakland	22,775,386 00	404,637 00	---	---	404,637 00
Southern California	Los Angeles	11,215,651 00	194,941 66	---	---	194,941 66
State Investment	San Francisco	14,110,554 00	250,943 13	---	---	250,943 13
Sun	San Francisco	19,154,644 00	261,610 55	4,738,022 00	159,719 97	421,330 52
Union	San Francisco	54,256,418 00	727,287 66	15,780,522 00	238,645 48	965,933 14
Totals	---	\$389,970,015 00	\$5,957,222 32	\$71,633,691 00	\$1,178,340 90	\$7,135,563 22
NAME.	Location.	RISKS IN FORCE DECEMBER 31, 1888.				Total Premiums.
		Fire.	Premiums.	Marine.	Premiums.	
Alta Fire	Stockton	\$1,785,802 00	\$33,858 82	---	---	\$33,858 82
Anglo-Nevada	San Francisco	63,919,393 00	890,009 62	\$938,111 00	\$23,402 62	913,412 24
California	San Francisco	39,746,704 00	575,207 74	3,105,086 00	125,753 00	700,961 34
Commercial	San Francisco	23,207,444 00	320,916 69	2,944,439 00	11,862 72	332,768 81
Fireman's Fund	San Francisco	95,308,067 00	1,295,220 25	1,630,042 00	104,786 30	1,370,006 55
Home Mutual	San Francisco	25,483,762 00	467,883 54	---	---	467,883 54
Oakland Home	Oakland	14,896,501 00	247,377 92	---	---	247,377 92
Southern California	Los Angeles	8,741,044 00	151,571 89	---	---	151,571 99
State Investment	San Francisco	14,117,615 00	241,210 82	---	---	241,210 82
Sun	San Francisco	15,706,612 00	223,413 75	1,154,204 00	72,158 14	295,571 89
Union	San Francisco	45,785,127 00	579,551 68	1,192,294 00	72,066 01	651,617 69
Totals	---	\$348,698,071 00	\$4,996,221 52	\$8,314,176 00	\$410,019 39	\$5,406,240 91

TABLE No. 18.

Summary of Assets, Liabilities, Income, Expenditures, etc., and amount of Surplus over Capital Stock, of Fire and Marine Insurance Companies doing business in California on the thirty-first day of December, 1888—Companies of other States.

NAME.	Location.	Cash Capital Paid Up.	Assets.	Liabilities, Capital not Included.	Income.
Ætna	Hartford	\$4,000,000 00	\$9,780,751 63	\$2,189,015 40	\$3,037,473 90
Agricultural	Watertown, New York	500,000 00	2,006,418 76	1,204,227 36	871,004 81
Amuzon	Cincinnati	300,000 00	536,919 41	169,101 64	233,544 15
American	Newark	600,000 00	1,965,052 83	408,818 56	508,009 18
American Central	Boston	300,000 00	624,229 44	191,158 60	277,758 41
American Fire	St. Louis	600,000 00	1,307,640 91	475,688 57	588,629 90
American Fire	Philadelphia	500,000 00	2,500,916 21	1,631,500 23	1,632,365 93
Boylston	New York	400,000 00	1,308,514 32	360,176 41	539,712 65
Citizens	Boston	557,200 00	941,483 57	235,222 92	346,557 96
Citizens	St. Louis	200,000 00	442,709 67	44,465 53	90,781 87
Citizens	New York	300,000 00	1,126,197 79	532,558 45	679,839 18
Concordia	Cincinnati	200,000 00	298,287 25	93,649 36	149,847 11
Connecticut Fire	Milwaukee	200,000 00	581,385 65	336,889 37	436,936 29
Continental	Hartford	1,000,000 00	2,260,917 01	806,198 18	1,114,768 90
Continental	New York	1,000,000 00	5,028,344 69	2,801,653 03	2,473,939 05
Farragut Fire	New York	200,000 00	396,534 80	121,483 33	168,300 12
Fire Association	Philadelphia	500,000 00	4,528,528 70	3,189,824 92	1,830,140 86
Firemen's	Baltimore	378,000 00	587,415 72	102,566 25	165,882 99
Firemen's	Newark	600,000 00	1,754,354 35	238,924 77	383,561 91
Franklin Fire	Philadelphia	400,000 00	3,202,802 49	1,837,476 94	623,644 25
German	Freeport, Illinois	200,000 00	2,316,574 66	1,760,753 16	1,300,746 23
German-American	New York	1,000,000 00	5,388,532 59	2,144,547 11	2,519,372 30
Germania	New Orleans	200,000 00	288,892 11	73,113 94	141,465 95
Germania Fire	New York	1,000,000 00	2,808,718 67	1,082,273 59	1,312,000 42
Girard Fire and Marine	Philadelphia	300,000 00	1,401,555 75	535,849 42	430,940 74
Glen's Falls	Glen's Falls, New York	200,000 00	1,671,158 93	559,991 30	568,149 96
Granite State Fire	Portsmouth, New Hampshire	200,000 00	402,963 97	191,818 96	299,073 52
Hanover Fire	New York	1,000,000 00	2,503,381 59	1,040,827 88	1,339,447 30
Hartford Fire	Hartford	1,250,000 00	5,750,080 47	2,206,007 88	2,847,714 62
Home	New York	3,000,000 00	8,991,657 27	4,459,194 66	4,617,024 94
Insurance Company of North America	Philadelphia	3,000,000 00	8,996,956 56	3,058,049 91	3,892,787 16
Insurance Company of the State of Pennsylvania	Philadelphia	200,000 00	674,042 80	370,674 47	347,441 74
Liberty	New York	800,000 00	1,379,956 26	464,548 10	667,758 87
Long Island	New York	300,000 00	467,833 30	146,572 42	252,176 42

Manufacturers and Builders	New York	200,000 00	477,700 69	157,911 49	224,692 80
Mechanics and Traders	New Orleans	375,000 00	692,013 51	136,902 79	234,551 38
Mechanics	Newark	400,000 00	1,528,784 20	688,797 93	839,310 30
Michigan Fire and Marine	Detroit	400,000 00	715,450 56	181,570 36	363,781 54
National Fire	New York	200,000 00	411,937 47	140,056 74	229,819 22
National Fire	Hartford	1,000,000 00	2,326,581 16	819,454 96	1,481,729 07
National Fire	Manchester	600,000 00	1,505,101 00	600,749 21	746,840 83
New Hampshire Fire	New York	500,000 00	2,300,135 37	1,486,557 55	1,838,080 23
Niagara Fire	Boston	200,000 00	387,420 85	137,023 76	179,082 68
North American	Portland	220,100 00	367,821 54	48,714 85	99,303 75
Oregon Fire and Marine	Hartford	1,000,000 00	1,743,802 70	581,981 16	826,025 61
Orient	New York	200,000 00	738,969 91	198,899 66	271,993 78
Pacific Fire	Philadelphia	400,000 00	3,106,553 18	1,413,477 49	1,147,348 41
Pennsylvania Fire	Manchester, New Hampshire	250,000 00	565,175 76	283,916 37	439,809 50
People's Fire	New York	1,000,000 00	5,054,408 00	3,821,438 31	3,826,719 64
Phoenix	Hartford	2,000,000 00	5,011,247 17	1,888,831 74	2,581,584 06
Phoenix	Providence, Rhode Island	400,000 00	1,174,148 28	661,525 92	1,010,038 23
Providence-Washington	New Haven	250,000 00	646,940 65	339,517 49	505,923 29
Security	New Orleans	300,000 00	484,995 99	143,841 21	364,786 73
Southern	Springfield, Massachusetts	1,250,000 00	3,200,141 88	1,332,149 50	1,718,202 79
Springfield Fire and Marine	St. Paul, Minnesota	500,000 00	1,684,054 70	779,350 58	1,140,476 98
St. Paul	New Orleans	498,400 00	970,825 32	234,533 11	555,190 01
Sun Mutual	Minneapolis	250,000 00	309,316 70	54,756 80	102,344 83
Syndicate	New Orleans	250,000 00	429,350 54	84,295 00	147,176 78
Teutonia	Chicago	500,000 00	1,345,574 75	423,081 08	589,771 73
Union	Philadelphia	250,000 00	601,065 95	424,210 36	471,230 86
United States Fire	New York	250,000 00	606,178 18	170,155 97	221,870 26
Westchester Fire	New York	300,000 00	1,407,452 00	791,985 28	909,080 39
Williamsburg City Fire	Brooklyn	250,000 00	1,365,541 27	504,537 29	604,919 97
Totals		\$39,578,700 00	\$125,340,079 11	\$53,661,187 58	\$70,613,405 24

TABLE No. 18—Continued.

NAME.	Location.	Expenditures.	Losses Incurred during the Year.	Net Surplus.
Ætna	Hartford	\$2,905,659 09	\$1,352,822 76	\$3,591,736 23
Agricultural	Watertown, New York	780,237 43	363,200 00	302,191 40
Amazon	Cincinnati	255,062 17	130,023 22	67,787 77
American	Newark	461,221 18	237,426 41	956,234 27
American	Boston	243,120 54	157,418 28	133,070 81
American Central	St. Louis	554,651 10	340,252 00	231,952 34
American Fire	Philadelphia	1,567,810 15	968,325 40	349,415 98
American Fire	New York	534,906 15	259,090 34	538,337 91
Boylston	Boston	314,354 86	155,037 37	149,000 65
Citizens	St. Louis	78,806 64	29,708 65	198,244 14
Citizens	New York	698,108 14	405,912 58	243,639 34
Citizens	Cincinnati	158,258 06	87,422 08	4,637 89
Concordia	401,418 68	236,276 44	44,496 28	
Connecticut Fire	Hartford	1,024,228 06	610,308 44	454,718 83
Continental	New York	2,305,322 59	1,155,579 81	1,226,691 66
Farragut Fire	New York	192,422 65	97,749 96	75,051 17
Fire Association	Philadelphia	1,851,035 48	1,080,824 50	838,705 78
Firemen's	Baltimore	156,202 51	79,478 76	106,849 47
Firemen's	Newark	347,063 75	174,140 24	915,432 58
Franklin Fire	Philadelphia	590,026 39	288,935 78	965,325 55
German	Freeport, Illinois	1,231,344 25	668,916 38	355,821 50
German-American	New York	2,553,617 52	1,400,556 76	2,243,985 48
Germania	New Orleans	126,243 20	76,370 03	15,578 17
Germania Fire	New York	1,186,302 90	606,636 88	726,445 08
Girard Fire and Marine	Philadelphia	396,270 75	167,185 00	624,706 33
Glen's Falls	Glen's Falls, New York	492,504 51	266,844 10	911,167 63
Granite State Fire	Portsmouth, New Hampshire	268,932 43	181,280 03	11,085 01
Hanover Fire	New York	1,347,561 24	752,157 04	462,553 71
Hartford Fire	Hartford	2,430,646 79	1,360,488 88	2,233,982 59
Home	New York	4,173,620 82	2,514,700 86	1,502,462 61
Insurance Company of North America	Philadelphia	3,747,615 74	2,048,882 01	2,638,905 65
Insurance Company of the State of Pennsylvania	Philadelphia	339,825 42	192,079 64	103,368 33
Liberty	New York	542,800 73	326,778 64	115,408 16
Long Island	New York	297,461 40	109,705 20	21,240 88
Manufacturers and Builders	New York	238,481 87	128,283 08	119,789 20
Mechanics and Traders	New Orleans	206,161 21	102,680 49	150,110 72
Merchants	Newark	689,903 63	408,762 89	433,986 27

Michigan Fire and Marine	235,458 93	137,511 06	133,880 20
National Fire	229,246 92	121,169 80	71,880 73
National Fire	1,172,729 77	593,992 64	507,126 20
New Hampshire Fire	616,438 01	371,070 30	304,351 79
Niagara Fire	1,761,364 30	991,363 43	373,577 82
North American	151,202 07	97,826 56	50,397 09
Oregon Fire and Marine	87,376 64	33,089 34	99,006 69
Orient	760,381 68	430,093 77	161,821 54
Pacific Fire	249,977 51	140,353 62	340,070 25
Pennsylvania Fire	1,002,573 74	610,000 00	1,291,075 69
People's Fire	385,280 68	254,085 82	31,265 39
Phoenix	3,767,297 31	2,047,799 55	233,169 69
Phoenix	2,338,357 81	1,349,794 60	1,172,415 43
Providence-Washington	927,103 63	563,170 28	112,622 36
Security	558,047 97	378,213 69	57,423 16
Southern	292,467 58	173,269 21	40,254 78
Springfield Fire and Marine	1,583,161 47	897,866 06	617,992 38
St. Paul	972,936 78	592,537 03	405,304 12
Sun Mutual	516,269 64	262,998 37	237,892 21
Syndicate	92,389 92	48,103 24	4,559 90
Teutonia	136,186 07	82,488 80	95,065 54
Traders	609,538 47	377,633 35	422,493 67
Union	502,631 04	470,499 58	16,855 59
United States Fire	178,959 55	76,707 50	246,022 21
Westchester Fire	902,858 76	536,992 35	312,466 72
Williamsburg City Fire	533,998 10	266,708 58	611,003 98
Totals	\$56,266,496 88	\$31,487,649 46	\$32,060,193 53

TABLE No. 19.

Showing the various items composing the Assets of Fire and Marine Insurance Companies doing business in California on the thirty-first day of December, 1888—Companies of other States.

NAME.	Location.	Real Estate.	Loans on Bonds and Mortgages.	Stock and Bonds Owned by the Company.	Loans on Stocks and Other Collateral Securities.	Cash in Office and in Banks.
Ætna.....	Hartford.....	\$365,000 00	\$43,700 00	\$8,011,751 50	\$7,770 00	\$78,970 57
Agricultural.....	Watertown, N. Y.....	173,661 10	1,131,897 43	392,000 00	51,450 00	183,352 43
Amazon.....	Cincinnati.....	90,150 00	28,284 70	189,756 50	175,212 50	13,350 00
American.....	Newark.....	367,022 96	1,101,185 33	381,000 00	17,200 00	49,820 15
American.....	Boston.....	500,000 00	-----	484,439 52	49,306 25	53,739 73
American Central.....	St. Louis.....	230,100 00	976,639 50	510,000 00	110,000 00	78,749 69
American Fire.....	Philadelphia.....	-----	55,220 00	1,024,157 78	97,000 00	111,781 74
American Fire.....	New York.....	-----	182,000 00	1,005,532 00	153,250 00	30,224 74
Boylston.....	Boston.....	-----	40,350 00	518,732 00	103,000 00	96,382 09
Citizens.....	St. Louis.....	9,080 00	84,554 60	211,850 00	125,000 00	17,489 44
Citizens.....	New York.....	119,500 00	-----	653,900 00	109,900 00	50,455 11
Citizens.....	Cincinnati.....	-----	310,555 00	263,888 00	-----	8,141 19
Concordia.....	Milwaukee.....	-----	624,650 00	146,375 00	-----	44,353 85
Connecticut Fire.....	Hartford.....	87,550 00	-----	1,256,787 00	19,300 00	161,717 27
Continental.....	New York.....	690,500 00	167,000 00	3,437,437 00	110,700 00	278,172 61
Farragut Fire.....	New York.....	6,000 00	22,000 00	313,249 75	3,900 00	29,382 67
Fire Association.....	Philadelphia.....	47,700 00	1,346,755 51	2,680,582 50	149,750 00	123,102 78
Firemen's.....	Baltimore.....	146,875 00	-----	374,793 60	-----	43,793 17
Firemen's.....	Newark.....	121,678 08	901,191 46	674,631 42	-----	32,782 80
Franklin Fire.....	Philadelphia.....	322,150 00	693,806 34	1,098,466 00	849,000 00	201,288 50
German.....	Freeport, Ill.....	17,000 00	1,213,061 87	275,795 00	59,955 50	220,167 59
German-American.....	New York.....	-----	-----	4,918,169 00	-----	235,353 23
Germania.....	New Orleans.....	69,619 34	5,575 00	129,253 90	22,875 00	19,122 63
Germania Fire.....	New York.....	580,000 00	84,500 00	1,490,075 00	6,500 00	42,325 33
Grand Fire and Marine.....	New York.....	296,000 00	638,083 33	3,939,900 84	20,100 00	82,284 33
Glen's Falls.....	Glen's Falls, N. Y.....	13,000 00	618,842 75	772,210 00	3,000 00	184,546 72
Granite State Fire.....	Portsmouth, N. H.....	-----	106,250 00	292,773 00	2,480 00	44,047 33
Hanover Fire.....	New York.....	-----	88,000 00	2,176,702 50	300 00	83,067 06
Hartford Fire.....	Hartford.....	543,675 60	1,183,000 00	2,912,716 00	53,500 00	631,201 67
Home.....	New York.....	1,345,675 14	701,300 00	5,609,849 89	239,400 00	339,853 26
Insurance Company of North America.....	Philadelphia.....	345,424 47	2,336,076 73	4,456,267 00	67,850 00	722,412 88
Insurance Company of the State of Pennsylvania.....	Philadelphia.....	228,800 00	109,450 00	238,160 00	10,000 00	46,665 78
Liberty.....	New York.....	-----	-----	952,500 00	-----	325,076 35

Long Island	New York	200,170 00	188,902 49	68,349 88
Manufacturers and Builders	New York	102,000 00	309,895 50	13,649 08
Mechanics and Traders	New Orleans	25,628 35	554,883 87	25,047 87
Merchants	Newark	102,757 15	778,045 75	85,927 30
Michigan Fire and Marine	Detroit	586,659 33	30,525 00	30,414 54
National Fire	New York	36,438 98	297,137 50	20,195 37
National Fire	Hartford	632,103 87	1,387,796 00	142,141 91
New Hampshire Fire	Manchester, N. H.	362,995 86	953,630 00	61,936 96
Niagara Fire	New York	46,050 00	1,359,989 40	192,978 38
North American	Boston	68,358 36	243,008 00	15,467 55
Oregon Fire and Marine	Portland	178,800 00	136,191 56	26,554 04
Orient	Hartford	242,908 00	1,224,648 41	69,740 57
Pacific Fire	New York	125,600 00	491,243 75	18,994 06
Pennsylvania Fire	Philadelphia	329,070 00	1,339,720 00	45,655 10
People's Fire	Manchester, N. H.	176,195 00	238,584 25	60,641 12
Phoenix	New York	199,550 00	1,691,002 00	492,759 73
Phoenix	Hartford	785,550 00	3,421,049 00	307,789 55
Providence-Washington	Providence, R. I.		334,805 00	81,745 26
Security	New Haven	127,625 00	359,205 50	22,041 84
Southern	New Orleans	2,000 00	312,350 00	96,146 87
Springfield Fire and Marine	Springfield, Mass.	926,900 00	2,478,324 00	134,479 65
St. Paul	St. Paul, Minn.	509,163 71	488,035 75	116,501 75
Sun Mutual	New Orleans	48,834 84	583,312 74	120,000 45
Syndicate	Minneapolis	78,500 00	125,600 00	28,300 04
Teutonia	New Orleans	78,551 66	180,216 50	41,402 77
Traders	Chicago	205,525 00	1,016,148 75	60,636 00
Union	Philadelphia	1,500 00	395,401 50	27,882 91
United States Fire	New York	574,200 00	57,487 50	2,210 00
Westchester Fire	New York	351,752 50	873,700 00	93,825 92
Williamsburg City Fire	Brooklyn	276,050 00	343,141 15	28,128 00
Totals		\$21,820,102 50	\$72,037,807 80	\$8,125,512 16
			\$4,004,594 47	

TABLE No. 19—Continued.

NAME.	Location.	Interest Due and Accrued.	Premiums in Course of Collection.	Bills Receivable, not Maturing, taken for Marine and Inland Risks.	All Other Assets.	Total Assets.
Ætna.....	Hartford.....	\$949 14	\$372,910 42	---	---	\$9,780,751 63
Agricultural.....	Watertown, N. Y.	35,710 21	50,814 44	\$16,218 15	\$1,225 00	2,006,418 76
Amazon.....	Cincinnati.....	1,114 66	35,500 37	1,431 78	2,148 90	536,949 41
American.....	Newark.....	21,617 57	22,962 81	---	4,244 01	1,965,052 83
American.....	Boston.....	3,079 65	11,368 44	21,468 77	826 98	624,229 44
American Central.....	St. Louis.....	---	78,871 22	---	---	1,307,640 91
American Fire.....	Philadelphia.....	18,680 91	34,337 48	---	---	2,500,916 21
American Fire.....	New York.....	1,794 44	62,840 14	---	8,215 80	1,308,514 32
Baylston.....	Boston.....	4,791 29	23,006 00	12,772 19	---	941,483 57
Citizens.....	St. Louis.....	752 50	8,187 73	---	---	442,709 67
Citizens.....	New York.....	6,653 43	94,279 10	---	955 55	1,126,197 79
Citizens.....	Cincinnati.....	3,030 00	20,228 06	---	---	298,287 25
Citizens.....	Milwaukee.....	5,998 64	43,503 16	---	---	581,385 65
Concordia.....	Hartford.....	---	110,912 74	---	---	2,200,917 01
Connecticut Fire.....	New York.....	31,693 71	146,450 04	128,688 45	7,732 88	5,028,344 60
Continental.....	New York.....	381 00	21,549 08	---	72 00	336,534 50
Farragut Fire.....	Philadelphia.....	44,935 63	135,143 78	---	498 50	4,528,528 70
Fire Association.....	Baltimore.....	7,122 69	13,428 01	---	1,296 25	587,415 72
Firemen's.....	Newark.....	14,148 23	8,813 86	---	1,108 50	1,751,354 35
Franklin Fire.....	Philadelphia.....	12,201 20	49,890 45	---	---	3,202,802 49
German.....	Freeport, Ill.	55,938 70	131,731 17	342,924 83	---	2,316,574 06
German-American.....	New York.....	550 00	253,860 36	---	---	5,388,532 59
Germania.....	New Orleans.....	3,365 20	38,463 36	317 08	100 00	288,692 11
Germania Fire.....	New York.....	2,375 00	128,534 72	---	3,808 62	2,808,718 67
Girard Fire and Marine.....	Philadelphia.....	11,998 67	37,656 80	912 54	3,459 24	1,461,555 75
Glen's Falls.....	Glen's Falls, N. Y.	4,370 87	44,938 59	---	---	1,671,158 93
Granite State Fire.....	Portsmouth, N. H.	5,325 56	42,028 08	250 00	---	402,903 97
Hanover Fire.....	New York.....	10,101 50	140,785 31	---	4,335 22	2,503,381 59
Hartford Fire.....	Hartford.....	21,106 91	384,652 90	---	17,227 39	5,750,080 47
Home.....	New York.....	79,098 83	604,748 75	---	---	8,961,657 27
Insurance Company of North America.....	Philadelphia.....	25,093 80	549,237 67	21,751 40	99,037 69	8,696,956 53
Insurance Company of the State of Pennsylvania.....	Philadelphia.....	2,935 58	20,702 41	95,556 32	15,365 78	674,042 80
Liberty.....	New York.....	---	102,379 91	1,963 25	---	1,379,956 26
Long Island.....	New York.....	2,189 73	8,221 20	---	---	467,833 30
Manufacturers and Builders.....	New York.....	2,374 61	26,481 50	---	---	477,700 69
Mechanics and Traders.....	New Orleans.....	---	34,991 08	8,770 37	---	682,013 51

Merchants	Newark	12,108 18	126,750 82	428 00	1,528,784 20
Michigan Fire and Marine	Detroit	17,658 48	30,842 04	---	715,450 56
National Fire	New York	2,009 79	26,155 83	---	411,937 47
National Fire	Hartford	25,528 75	109,082 23	---	2,326,581 16
New Hampshire Fire	Manchester, N. H.	6,448 76	67,428 42	---	1,505,101 00
Niagara Fire	New York	11,034 54	175,545 26	12,320 61	2,300,135 37
North American	Boston	3,497 57	21,590 07	---	387,420 85
Oregon Fire and Marine	Portland	4,835 55	20,440 39	---	367,821 54
Orient	Hartford	24,619 17	134,539 91	680 95	1,743,802 70
Pacific Fire	New York	4,744 03	27,683 30	104 17	738,909 91
Pennsylvania Fire	Philadelphia	8,955 38	131,927 70	600 00	3,106,553 18
People's Fire	Manchester, N. H.	14,376 49	62,500 91	---	565,175 76
Phoenix	New York	6,949 32	594,193 22	371,163 64	5,054,608 00
Phoenix	Hartford	21,316 99	258,887 52	1,117 51	5,061,247 17
Providence-Washington	Providence, R. I.	---	100,820 90	56,777 12	1,174,148 28
Security	New Haven	1,725 24	67,777 75	5,056 48	646,940 65
Southern	New Orleans	---	50,789 14	150 00	484,995 99
Springfield Fire and Marine	Springfield, Mass.	27,177 31	191,626 00	881 92	3,200,141 88
St. Paul	St. Paul, Minn.	23,846 61	71,896 92	375 90	1,684,654 70
Sum Mutual	New Orleans	---	86,945 75	---	970,825 32
Syndicate	Minneapolis	5,648 22	12,808 44	---	309,316 70
Teutonia	New Orleans	---	24,640 94	6,099 40	429,330 54
Traders	Chicago	6,493 19	43,285 85	11,985 96	1,345,374 75
Union	Philadelphia	1,510 00	96,052 15	2,419 39	691,065 95
United States Fire	New York	3,563 79	26,936 89	250 00	666,178 18
Westchester Fire	New York	3,142 63	77,530 95	---	1,407,452 00
Williamsburg City Fire	Brooklyn	7,945 56	60,053 61	14,429 05	1,365,541 27
Totals		\$686,711 01	\$6,573,744 05	\$758,417 36	\$125,340,079 11

TABLE No. 20.

Showing the various items composing the Liabilities, except Capital Stock, of Fire and Marine Insurance Companies doing business in California on the thirty-first day of December, 1888—Companies of other States.

NAME.	Location.	Losses Adjusted	Losses Unadjusted.	Losses Reinstated.	Cash Dividends.	Fire Reinsurance.
Ætna.....	Hartford.....	\$32,751 30	\$150,247 13	\$4,680 00	-----	\$1,884,671 09
Agricultural.....	Watertown, N. Y.....	13,861 22	12,118 00	22,300 00	\$20 00	1,155,918 14
Amazon.....	Cincinnati.....	9,281 79	9,200 00	1,000 00	1,289 00	148,440 85
American.....	Newark.....	4,633 23	24,781 93	7,710 06	4,070 80	357,808 10
American.....	Boston.....	5,008 94	20,701 47	1,325 00	114 00	121,994 76
American Central.....	St. Louis.....	11,187 47	41,843 25	15,780 25	-----	395,046 92
American Fire.....	Philadelphia.....	39,114 59	94,873 91	29,649 49	345 00	1,464,557 21
American Fire.....	New York.....	32,378 31	-----	-----	-----	311,034 00
Baylston.....	Boston.....	-----	34,900 00	-----	-----	188,980 88
Citizens.....	St. Louis.....	2,223 00	1,679 00	-----	-----	39,128 65
Citizens.....	New York.....	12,985 15	35,407 72	4,234 55	272 10	400,757 46
Concordia.....	Cincinnati.....	13,788 86	6,662 30	1,000 00	-----	63,454 92
Concordia.....	Milwaukee.....	8,081 48	20,925 00	4,250 00	-----	296,709 52
Connecticut Fire.....	Hartford.....	-----	93,933 70	15,881 64	-----	696,382 84
Continental.....	New York.....	-----	160,507 24	44,256 00	749 50	2,501,881 39
Farragut Fire.....	New York.....	-----	11,044 70	-----	-----	106,552 11
Fire Association.....	Philadelphia.....	61,133 11	85,883 45	42,010 86	-----	3,000,737 50
Firemen's.....	Baltimore.....	2,130 90	4,979 81	6,054 05	683 63	84,741 51
Firemen's.....	Newark.....	-----	23,565 82	-----	-----	210,907 36
Franklin Fire.....	Philadelphia.....	35,807 98	10,805 00	8,824 00	292 50	1,774,246 37
German.....	Freeport, Ill.....	32,191 00	45,792 00	7,500 00	-----	1,650,678 41
German-American.....	New York.....	63,382 61	114,815 71	20,566 60	-----	1,890,354 32
Germania.....	New Orleans.....	11,587 86	-----	-----	10,000 00	51,526 08
Germania Fire.....	New York.....	26,325 13	26,245 12	14,629 04	-----	1,015,054 30
Girard Fire and Marine.....	Philadelphia.....	-----	24,298 06	700 00	-----	499,846 83
Glen's Falls.....	Glen's Falls, N. Y.....	7,825 70	11,584 95	7,150 53	516,012 59	170,913 90
Granite State Fire.....	Portsmouth, N. H.....	4,141 97	8,198 67	1,500 00	-----	905,572 43
Hanover Fire.....	New York.....	50,871 93	35,982 07	20,497 12	-----	2,014,565 44
Hartford Fire.....	Hartford.....	57,816 52	130,411 67	28,804 25	480 00	3,745,752 00
Home.....	New York.....	74,835 39	329,848 01	60,263 98	-----	2,698,625 65
Insurance Company of North America.....	Philadelphia.....	69,780 00	108,577 00	40,554 00	-----	337,427 47
Insurance Company of the State of Pennsylvania.....	Philadelphia.....	31,064 00	-----	-----	-----	365,770 47
Liberty.....	New York.....	17,581 45	40,166 62	3,500 00	-----	127,916 98
Long Island.....	New York.....	9,955 44	6,000 00	-----	-----	127,379 52
Manufacturers and Builders.....	New York.....	11,658 61	9,544 80	-----	195 00	-----

Mechanics and Traders.....	New Orleans.....	16,079 47	16,272 02	4,500 00	18,750 00	85,501 30
Merchants.....	Newark.....	48,349 00	28,629 29	-----	-----	570,001 36
Michigan Fire and Marine.....	Detroit.....	8,221 00	5,707 88	-----	-----	167,641 48
National Fire.....	New York.....	4,705 27	10,280 00	1,000 00	-----	119,123 39
National Fire.....	Hartford.....	53,898 21	12,901 69	7,000 00	-----	724,129 03
New Hampshire Fire.....	Manchester, N. H.....	35,618 75	53,421 00	-----	-----	498,223 78
Niagara Fire.....	New York.....	148,716 07	-----	26,962 82	656 00	1,262,518 25
North American.....	Boston.....	5,236 64	10,945 54	-----	64 00	115,122 69
Oregon Fire and Marine.....	Portland.....	-----	1,007 03	-----	-----	44,797 42
Orient.....	Hartford.....	56,579 67	-----	6,779 00	-----	493,617 23
Pacific Fire.....	New York.....	10,840 00	7,900 00	2,650 00	-----	167,238 36
Pennsylvania Fire.....	Philadelphia.....	87,103 89	-----	-----	-----	1,328,373 60
People's Fire.....	Manchester, N. H.....	18,956 16	10,484 00	1,900 00	-----	240,070 03
Phoenix.....	New York.....	-----	162,889 80	31,900 00	-----	3,446,160 55
Phoenix.....	Hartford.....	232,478 38	-----	13,686 87	-----	1,642,656 49
Providence-Washington.....	Providence, R. I.....	13,587 37	93,204 20	12,289 30	-----	455,798 58
Security.....	New Haven.....	9,247 53	25,048 63	2,687 10	-----	233,506 80
Southern.....	New Orleans.....	37,500 00	-----	-----	2,208 00	102,433 94
Springfield Fire and Marine.....	Springfield, Mass.....	29,675 95	76,140 50	25,017 96	-----	1,172,571 19
St. Paul.....	St. Paul, Minn.....	24,557 82	51,720 23	5,233 15	-----	595,482 30
Sun Mutual.....	New Orleans.....	31,807 00	-----	-----	18,322 50	181,111 00
Synthetic.....	Minneapolis.....	1,474 95	1,400 00	-----	-----	51,891 85
Teutonic.....	New Orleans.....	11,083 00	-----	-----	910 00	72,302 00
Traders.....	Chicago.....	15,156 74	43,786 39	10,950 00	-----	333,915 22
Union.....	Philadelphia.....	15,980 93	54,557 67	10,487 41	2,547 13	228,757 38
United States Fire.....	New York.....	16,926 37	2,930 00	-----	180 25	98,998 86
Westchester Fire.....	New York.....	31,027 29	33,954 62	2,950 00	-----	722,268 32
Williamsburg City Fire.....	Brooklyn.....	7,613 65	34,027 24	11,200 00	145 00	434,124 19
Totals.....	-----	\$1,725,856 08	\$2,472,402 87	\$592,025 03	\$62,254 41	\$46,942,127 29

TABLE No. 20—Continued.

NAME.	Location.	Marine Reinsurance.	All Other Claims.	Total Liabilities, Capital not Included.	Not Surplus.
Atna.....	Hartford.....	\$29,557 41	\$87,108 47	\$2,189,015 40	\$3,591,736 23
Agricultural.....	Watertown, N. Y.....	-----	-----	1,204,227 36	302,191 40
Amazon.....	Cincinnati.....	-----	-----	169,161 64	67,787 77
American.....	Newark.....	-----	9,814 41	408,818 56	956,234 27
American.....	Boston.....	-----	7,051 23	191,158 60	133,070 84
American Central.....	St. Louis.....	34,953 20	11,830 68	475,688 57	231,952 34
American Fire.....	Philadelphia.....	-----	2,960 00	1,631,500 23	349,415 98
American Fire.....	New York.....	-----	16,764 10	360,176 41	518,337 91
Boylston.....	Boston.....	-----	3,268 10	235,222 92	149,060 65
Citizens.....	St. Louis.....	-----	1,434 88	44,465 53	198,214 14
Citizens.....	New York.....	-----	18,901 77	532,558 45	293,639 34
Citizens.....	Cincinnati.....	-----	8,743 28	93,649 36	4,637 89
Concordia.....	Milwaukee.....	-----	6,922 37	336,889 37	44,496 28
Connecticut Fire.....	Hartford.....	-----	-----	2,801,453 03	1,225,691 46
Continental.....	New York.....	-----	91,255 90	121,483 33	75,051 17
Parragut Fire.....	New York.....	-----	3,886 52	3,189,824 92	838,705 78
Fire Association.....	Philadelphia.....	-----	-----	102,566 25	106,849 47
Firemen's.....	Baltimore.....	-----	3,976 35	238,921 77	915,432 58
Firemen's.....	Newark.....	-----	4,448 59	1,837,476 94	965,325 55
Franklin Fire.....	Philadelphia.....	-----	7,481 00	1,760,753 16	355,821 50
German.....	Freeport, Ill.....	-----	21,591 72	2,141,547 11	2,243,985 48
German-American.....	New York.....	-----	55,427 87	73,113 91	15,578 17
Germania.....	New Orleans.....	-----	-----	1,082,273 59	726,445 08
Germania Fire.....	New York.....	-----	-----	536,849 42	624,761 33
Girard Fire and Marine.....	Philadelphia.....	-----	12,004 53	559,991 30	911,167 63
Glen's Falls.....	Glen's Falls, N. Y.....	-----	17,417 53	191,813 96	11,085 01
Granite State Fire.....	Portsmouth, N. H.....	-----	7,034 42	1,040,827 88	462,553 71
Hanover Fire.....	New York.....	-----	27,704 33	2,966,097 66	2,233,982 59
Hartford Fire.....	Hartford.....	-----	34,500 00	4,459,194 66	1,502,492 61
Home.....	New York.....	21,755 00	226,290 28	2,658,906 65	2,658,906 65
Insurance Company of North America.....	Philadelphia.....	152,408 27	18,404 99	3,058,049 91	103,368 33
Insurance Company of the State of Pennsylvania.....	Philadelphia.....	-----	2,183 00	370,674 47	115,408 16
Liberty.....	New York.....	-----	37,520 56	464,548 10	115,408 16
Long Island.....	New York.....	-----	2,700 00	146,572 42	21,260 88
Manufacturers and Builders.....	New York.....	-----	9,133 56	157,911 49	119,789 20
Mechanics and Traders.....	New Orleans.....	-----	300 00	136,902 79	150,110 72

Merchants	Newark	37,318 28	688,797 93	439,986 27
Michigan Fire and Marine	Detroit	-----	181,570 36	133,880 20
National Fire	New York	-----	140,056 74	71,880 73
National Fire	Hartford	-----	21,226 03	507,136 20
New Hampshire Fire	Manchester, N. H.	-----	13,485 08	304,351 79
Niagara Fire	New York	-----	35,779 53	373,577 82
North American	Boston	-----	5,654 89	50,397 09
Oregon Fire and Marine	Portland	-----	2,910 40	99,006 69
Orient	Hartford	-----	25,005 26	161,821 54
Pacific Fire	New York	-----	10,571 30	340,070 25
Pennsylvania Fire	Philadelphia	-----	1,415,477 49	1,291,075 69
People's Fire	Manchester, N. H.	-----	198,899 66	283,169 69
Phoenix	New York	-----	283,910 37	31,265 39
Phoenix	Hartford	-----	3,821,438 31	1,172,415 43
Providence-Washington	Providence, R. I.	-----	1,888,831 74	112,622 36
Security	New Haven	-----	681,525 92	57,423 16
Southern	New Orleans	-----	339,517 49	40,234 78
Springfield Fire and Marine	Springfield, Mass.	-----	143,841 21	617,992 38
St. Paul	St. Paul, Minn.	-----	1,332,149 50	405,304 12
Sun Mutual	New Orleans	-----	779,350 58	237,892 21
Syndicate	Minneapolis	-----	234,533 11	4,559 90
Teutonia	New Orleans	-----	54,756 80	95,005 54
Traders	Chicago	-----	84,295 00	422,493 67
Union	Philadelphia	-----	17,272 73	16,855 59
United States Fire	New York	-----	65,687 37	246,022 21
Westchester Fire	New York	-----	15,360 13	312,466 72
Williamsburg City Fire	Brooklyn	-----	4,785 05	611,003 98
Totals	-----	\$1,279,643 46	\$53,631,187 58	\$32,090,193 53

TABLE No. 21.

Showing the various items composing the Income of the Fire and Marine Insurance Companies doing business in California on the thirty-first day of December, 1888—Companies of other States.

NAME.	Location.	Fire Premiums.	Marine Premiums.	Interest on Bonds and Mortgages.
Athna	Hartford	\$2,448,943 95	\$159,907 74	\$2,349 34
Agricultural	Watertown, N. Y.	775,842 21	-----	65,563 49
Amazon	Cincinnati	213,281 78	-----	1,994 78
American	Newark	421,946 57	-----	55,537 89
American	Boston	195,124 33	-----	-----
American Central	St. Louis	524,352 74	50,654 52	-----
American Fire	Philadelphia	1,491,828 62	-----	46,448 06
Boylston	New York	491,265 78	-----	2,738 20
Boston	Boston	252,092 15	37,659 32	8,349 44
Citizens	St. Louis	65,214 09	3,994 26	1,580 00
Citizens	New York	638,157 07	-----	4,223 35
Citizens	Cincinnati	138,501 36	-----	-----
Concordia	Milwaukee	409,177 08	-----	19,019 21
Connecticut Fire	Hartford	1,015,125 32	-----	37,085 94
Continental	New York	2,238,225 75	6,919 68	8,943 74
Farragut Fire	New York	133,483 33	-----	1,213 00
Fire Association	Philadelphia	1,612,443 67	-----	83,063 03
Firemen's	Baltimore	141,604 39	-----	-----
Firemen's	Newark	288,706 88	-----	48,366 00
Franklin Fire	Philadelphia	481,297 92	-----	71,617 31
German	Freeport, Ill.	1,241,527 03	-----	81,586 11
German-American	New York	2,339,555 30	-----	-----
Germania	New Orleans	110,617 91	4,061 89	-----
Germania Fire	New York	1,197,700 32	-----	412 00
Girard Fire and Marine	Philadelphia	379,277 43	-----	4,874 98
Glen's Falls	Glen's Falls, N. Y.	489,756 12	-----	33,401 22
Granite State Fire	Portsmouth, N. H.	281,341 11	-----	36,111 78
Hanover Fire	New York	1,248,015 41	-----	6,801 47
Hartford Fire	Hartford	2,591,587 57	-----	4,410 00
Home	New York	4,332,914 95	4,857 00	74,630 64
Insurance Company of North America	Philadelphia	2,245,259 45	1,243,726 92	39,032 89
Insurance Company of the State of Pennsylvania	Philadelphia	307,206 55	-----	124,289 58
Liberty	New York	631,228 85	-----	6,616 56
Long Island	Brooklyn	233,026 20	-----	11,470 22

Manufacturers and Builders	New York	197,221 18	4,176 43
Mechanics and Traders	New Orleans	196,280 59	25,484 88
Merchants	Newark	778,813 03	26,046 35
Michigan Fire and Marine	Detroit	275,872 29	2,222 07
National Fire	New York	218,787 15	41,110 96
National Fire	Hartford	1,376,155 93	18,697 69
New Hampshire Fire	Manchester, N. H.	682,019 43	2,598 00
Niagara Fire	New York	1,756,176 08	1,757 78
North American	Boston	159,395 02	15,065 55
Oregon Fire and Marine	Portland	77,754 90	15,808 21
Orient	Hartford	749,832 48	6,295 78
Pacific Fire	New York	247,482 80	19,328 32
Pennsylvania Fire	Philadelphia	1,016,192 18	10,560 13
People's Fire	Manchester, N. H.	415,400 87	12,050 14
Phoenix	New York	3,616,312 33	57,096 26
Phoenix	Hartford	2,345,857 12	315,143 23
Providence-Washington	Providence, R. I.	654,153 76	7,495 66
Security	New Haven	418,063 29	12,633 63
Southern	New Orleans	340,697 22	27,478 75
Springfield Fire and Marine	Springfield, Mass.	1,584,393 59	1,991 15
St. Paul	St. Paul, Minn.	806,371 57	28,180 67
Sun Mutual	New Orleans	429,606 80	6,020 16
Synodicate	Minneapolis	84,138 36	350 00
Teutonia	New Orleans	100,193 26	22,562 03
Traders	Chicago	557,629 15	20,246 27
Union	Philadelphia	288,776 09	13,540 85
United States Fire	New York	147,998 83	
Westchester Fire	New York	907,365 51	
Williamsburg City Fire	Brooklyn	554,792 41	
Totals		\$52,589,304 01	\$2,543,832 40
			\$1,252,847 31

TABLE No. 21—Continued.

NAME.	Location.	Interest and Dividends from Other Sources.	Rents.	Received from all Other Sources.	Total Income.
Ætna.....	Hartford.....	\$415,979 93	\$9,992 94	-----	\$3,037,173 90
Agricultural.....	Watertown, N. Y.....	26,757 45	2,841 66	-----	871,004 81
Amazon.....	Cincinnati.....	16,431 69	1,835 90	-----	253,544 15
American.....	Newark.....	23,352 66	7,172 06	-----	508,009 18
American.....	Boston.....	25,721 30	-----	\$6,258 26	277,758 41
American Central.....	St. Louis.....	52,855 58	11,441 58	-----	588,629 90
American Fire.....	Philadelphia.....	74,654 25	-----	16,435 00	1,032,365 93
American Fire.....	New York.....	44,872 97	825 70	-----	539,742 65
Boylston.....	Boston.....	41,257 11	-----	7,199 94	346,557 96
Citizens.....	St. Louis.....	19,993 52	-----	-----	90,781 87
Citizens.....	New York.....	31,722 25	5,736 51	-----	679,839 18
Citizens.....	Cincinnati.....	10,925 75	-----	420 00	149,847 11
Concordia.....	Milwaukee.....	8,500 00	-----	240 00	436,936 29
Connecticut Fire.....	Hartford.....	62,557 64	-----	-----	1,114,768 90
Continental.....	New York.....	180,450 50	39,399 38	-----	2,473,939 05
Farragut Fire.....	New York.....	13,123 79	480 00	-----	108,300 12
Fire Association.....	Philadelphia.....	126,110 10	2,608 35	-----	1,830,140 86
Firemen's.....	Baltimore.....	16,079 91	8,198 69	5,915 71	165,882 99
Firemen's.....	Newark.....	38,508 96	7,920 07	-----	383,561 91
Franklin Fire.....	Philadelphia.....	57,801 86	10,774 13	2,153 00	623,614 25
German.....	Freeport, Ill.....	34,240 75	283 00	3,109 34	1,360,746 23
German-American.....	New York.....	209,817 00	-----	-----	2,549,372 30
Germania.....	New Orleans.....	26,374 15	-----	-----	141,465 95
Germania Fire.....	New York.....	83,179 91	26,845 21	-----	1,312,600 42
Girard Fire and Marine.....	Philadelphia.....	19,013 55	8,248 54	-----	439,940 74
Glen's Falls.....	Glen's Falls, N. Y.....	41,932 06	350 00	-----	568,149 96
Granite State Fire.....	Portsmouth, N. H.....	10,630 94	-----	-----	299,073 52
Hanover Fire.....	New York.....	87,021 89	22,795 47	-----	1,339,447 30
Hartford Fire.....	Hartford.....	155,700 94	91,131 26	-----	2,847,714 62
Home.....	New York.....	179,088 84	-----	47,326 71	3,892,787 16
Insurance Company of North America.....	Philadelphia.....	232,184 50	14,509 50	6,339 80	347,441 74
Insurance Company of the State of Pennsylvania.....	Philadelphia.....	12,509 33	-----	-----	667,758 87
Liberty.....	New York.....	36,530 02	-----	-----	252,176 42
Long Island.....	Brooklyn.....	7,680 00	6,316 68	-----	224,692 80
Manufacturers and Builders.....	New York.....	16,978 51	2,377 82	-----	234,551 38
Mechanics and Traders.....	New Orleans.....	35,892 97	-----	-----	839,310 30
Merchants.....	Newark.....	32,446 07	2,566 32	-----	-----

Michigan Fire and Marine.....	Detroit.....	3,859 38	57,403 52	363,781 54
National Fire.....	New York.....	8,810 00	-----	229,819 22
National Fire.....	Hartford.....	64,828 18	2,634 00	1,484,729 07
New Hampshire Fire.....	Manchester, N. H.....	46,123 71	-----	746,840 83
Niagara Fire.....	New York.....	61,272 66	18,032 89	1,838,080 23
North American.....	Boston.....	12,092 27	5,683 61	179,082 68
Oregon Fire and Marine.....	Portland.....	6,483 30	-----	99,303 75
Orient.....	Hartford.....	60,074 33	-----	826,025 61
Pacific Fire.....	New York.....	15,852 71	310 59	271,993 78
Pennsylvania Fire.....	Philadelphia.....	115,127 52	2,362 49	1,147,348 41
People's Fire.....	Manchester, N. H.....	13,848 50	2,700 39	439,809 50
Phoenix.....	New York.....	86,000 95	36,158 61	3,826,719 64
Providence-Washington.....	Hartford.....	172,633 29	5,997 39	2,581,584 06
Security.....	Providence, R. I.....	40,791 24	-----	1,010,088 23
Southern.....	New Haven.....	16,990 55	258 18	565,923 29
Springfield Fire and Marine.....	New Orleans.....	14,884 65	-----	364,786 73
St. Paul.....	Springfield, Mass.....	117,121 31	9,204 86	1,718,202 79
Stn Mutual.....	St. Paul, Minn.....	64,852 49	8,318 50	1,140,476 98
Syndicate.....	New Orleans.....	40,231 12	2,600 00	555,190 01
Tautonia.....	Minneapolis.....	17,357 02	849 45	102,344 83
Traders.....	New Orleans.....	18,802 85	-----	147,176 78
Union.....	Chicago.....	45,882 02	-----	589,771 73
United States Fire.....	Philadelphia.....	21,017 20	9,598 95	471,230 86
Westchester Fire.....	New York.....	3,815 69	521 65	221,870 26
Williamsburg City Fire.....	New York.....	34,395 72	144 00	969,680 39
Totals.....	Brooklyn.....	16,735 03	20,051 68	604,919 97
		\$3,629,763 34	\$191,571 50	\$60,613,465 24

TABLE No. 22.

Showing the various items composing the Expenditures of Fire and Fire and Marine Insurance Companies doing business in California on the thirty-first day of December, 1888—Companies of other States.

NAME.	Location.	Fire Losses.	Marine Losses.	Dividends.	Brokerage and Commission.
Ætna.....	Hartford.....	\$1,335,840 49	\$79,885 58	\$720,000 00	\$396,240 73
Agricultural.....	Watertown, N. Y.....	384,790 85	-----	50,100 00	186,483 45
Amazon.....	Cincinnati.....	148,517 59	-----	17,520 90	47,315 33
American.....	Newark.....	229,776 10	-----	65,213 90	72,440 03
American.....	Boston.....	94,843 62	-----	9,322 00	17,675 36
American Central.....	St. Louis.....	323,855 97	49,998 68	33,000 00	74,291 44
American Fire.....	Philadelphia.....	986,093 27	-----	49,730 00	282,237 70
American Fire.....	New York.....	200,896 01	-----	40,000 00	119,641 52
Boylston.....	Boston.....	148,128 97	20,248 74	33,432 00	49,485 20
Citizens.....	St. Louis.....	33,488 31	1,406 77	12,000 00	12,233 87
Citizens.....	New York.....	395,476 12	-----	29,956 20	122,275 65
Citizens.....	Cincinnati.....	95,593 97	-----	16,000 00	30,063 37
Concordia.....	Milwaukee.....	228,630 05	-----	14,000 00	35,936 24
Connecticut Fire.....	Hartford.....	602,957 42	-----	80,000 00	159,863 25
Continental.....	New York.....	1,239,308 65	6,388 76	124,620 00	427,351 56
Farragut Fire.....	New York.....	101,867 09	-----	20,000 00	26,725 23
Fire Association.....	Philadelphia.....	1,119,220 01	-----	200,000 00	337,038 48
Firemen's.....	Baltimore.....	85,166 19	-----	22,600 08	25,399 21
Firemen's.....	Newark.....	174,547 34	-----	72,000 34	40,371 23
Franklin Fire.....	Philadelphia.....	266,211 84	-----	90,035 00	82,343 81
German.....	Freeport, Ill.....	687,696 56	-----	40,000 00	357,323 26
German-American.....	New York.....	1,476,852 75	-----	200,000 00	378,967 18
Germania.....	New Orleans.....	71,995 24	4,374 79	10,000 00	17,895 07
Germania Fire.....	New York.....	632,584 79	-----	100,000 00	171,526 86
Girard Fire and Marine.....	Philadelphia.....	166,093 69	-----	75,000 00	72,310 75
Glen's Falls.....	Glen's Falls, N. Y.....	284,665 55	-----	20,000 00	98,449 12
Granite State Fire.....	Portsmouth, N. H.....	184,373 70	-----	44,238 38	44,238 38
Hanover Fire.....	New York.....	736,369 85	-----	100,000 00	233,567 47
Hartford Fire.....	Hartford.....	1,338,503 56	-----	250,000 00	410,545 75
Home.....	New York.....	2,358,790 10	-----	289,800 00	800,593 01
Insurance Company of North America.....	Philadelphia.....	1,286,898 53	935,149 46	450,000 00	560,747 11
Insurance Company of the State of Pennsylvania.....	Philadelphia.....	185,336 05	2,424 27	20,000 00	66,026 24
Liberty.....	New York.....	287,188 37	-----	-----	119,880 47
Long Island.....	Brooklyn.....	115,350 43	-----	9,000 00	57,917 61

Manufacturers and Builders	New York	127,161 75	-----	-----	13,033 00	50,839 62
Mechanics and Traders	New Orleans	90,009 33	-----	12,071 16	37,500 00	24,003 65
Merchants	Newark	366,008 99	-----	-----	40,150 00	169,110 68
Michigan Fire and Marine	Detroit	130,414 88	-----	-----	-----	57,384 38
National Fire	New York	127,890 31	-----	-----	16,000 00	53,701 27
National Fire	Hartford	595,979 52	-----	-----	100,000 00	221,444 76
New Hampshire Fire	Manchester, N. H.	353,125 04	-----	-----	40,000 00	135,009 75
Niagara Fire	New York	1,040,006 67	-----	4,656 36	50,130 00	310,735 20
North American	Boston	82,521 46	-----	-----	13,636 00	30,151 03
Oregon Fire and Marine	Portland	33,089 34	-----	-----	26,412 00	13,113 89
Orient	Hartford	433,682 98	-----	-----	60,000 00	134,684 87
Pacific Fire	New York	146,213 62	-----	-----	24,000 00	53,748 99
Pennsylvania Fire	Philadelphia	607,734 05	-----	-----	40,000 00	240,977 53
People's Fire	Manchester, N. H.	248,186 57	-----	-----	-----	91,005 54
Phoenix	New York	1,997,194 39	-----	418,039 83	-----	675,632 28
Phoenix	Hartford	1,301,400 06	-----	-----	280,000 00	388,343 23
Providence-Washington	Providence, R. I.	334,464 67	-----	237,779 45	32,000 00	174,730 30
Security	New Haven	281,688 71	-----	82,262 83	17,500 00	132,006 67
Southern	New Orleans	158,752 63	-----	8,016 58	25,981 06	58,744 51
Springfield Fire and Marine	Springfield, Mass.	936,076 08	-----	-----	125,000 00	259,408 38
St. Paul	St. Paul, Minn.	466,305 97	-----	140,141 49	50,000 00	203,009 67
Sun Mutual	New Orleans	252,090 52	-----	69,694 10	48,935 00	74,375 89
Syndicate	Minneapolis	47,656 88	-----	-----	7,500 00	16,033 57
Teutonia	New Orleans	55,297 56	-----	16,108 24	12,500 00	14,898 07
Traders	Chicago	374,447 02	-----	-----	50,000 00	104,659 82
Union	Philadelphia	186,368 09	-----	155,267 42	174 64	65,336 57
United States Fire	New York	47,601 20	-----	13,512 04	27,527 50	47,003 09
Worcester Fire	New York	530,263 74	-----	2,513 53	30,000 00	176,997 61
Williamsburg City Fire	Brooklyn	245,572 25	-----	-----	50,015 00	133,068 77
Totals		\$29,666,493 14	\$2,259,910 08	\$4,488,624 88	\$10,113,970 53	

TABLE No. 22—Continued.

NAME.	Location.	Office Salaries.	Taxes.	All Other Expenditures.	Total Expenditures.
<i>Aetha</i>	Hartford.....	\$168,112 40	\$50,270 31	\$215,309 58	\$2,965,639 09
Agricultural	Watertown, N. Y.	91,350 46	16,221 79	51,290 88	780,237 43
Amazon	Cincinnati	18,183 01	5,253 95	18,271 39	255,032 17
American	Newark	41,743 57	16,039 80	36,007 78	461,221 18
American	Boston	5,320 00	-----	65,990 88	243,126 54
American Central	St. Louis	49,471 01	10,501 45	63,531 23	554,651 10
American Fire	Philadelphia	201,085 47	38,422 04	9,641 67	1,567,810 15
American Fire	New York	50,674 94	4,641 94	59,050 84	554,906 15
Boylston	Boston	30,400 00	2,191 54	30,468 41	314,354 86
Citizens	St. Louis	9,500 00	5,300 00	4,877 65	78,806 64
Citizens	New York	43,818 18	15,830 85	90,751 14	698,108 14
Citizens	Cincinnati	9,820 00	2,556 54	4,224 18	158,258 06
Concordia	Milwaukee	22,180 00	8,472 34	34,170 05	401,418 68
Connecticut Fire	Hartford	83,001 08	23,601 53	74,804 78	1,024,228 06
Continental	New York	278,801 11	50,334 97	178,456 94	2,305,322 59
Farragut Fire	New York	23,458 33	3,063 64	17,308 36	192,422 65
Fire Association	Philadelphia	117,023 67	56,024 99	21,728 33	1,851,025 48
Firemen's	Baltimore	13,859 36	9,177 67	-----	136,202 51
Firemen's	Newark	19,834 01	11,089 29	20,224 88	347,066 75
Franklin Fire	Philadelphia	55,125 89	23,808 70	72,501 15	590,026 39
German	Freeport, Ill.	108,784 18	20,343 97	17,196 28	1,231,344 25
German-American	New York	185,594 06	59,749 57	252,453 96	2,553,617 52
Germania	New Orleans	13,263 62	8,764 48	-----	126,283 20
Germania Fire	New York	85,758 47	24,350 64	172,082 14	1,186,302 90
Glard Fire and Marine	Philadelphia	46,440 25	11,486 01	24,940 15	396,270 75
Glen's Falls	Glen's Falls, N. Y.	39,848 49	11,243 28	38,298 07	492,504 51
Granite Slate Fire	Portsmouth, N. H.	11,874 00	6,079 96	22,366 39	268,932 43
Hanover Fire	New York	142,820 46	26,358 95	108,444 51	1,347,561 24
Hartford Fire	Hartford	185,149 37	52,193 49	194,254 62	2,430,646 79
Home	New York	374,732 68	64,272 18	275,132 35	4,173,620 32
Insurance Company of North America	Philadelphia	132,067 32	101,224 54	280,928 78	3,747,615 74
Insurance Company of the State of Pennsylvania	Philadelphia	16,666 29	10,009 45	39,304 12	339,825 42
Liberty	New York	53,232 95	8,421 95	74,076 99	542,800 73
Long Island	Brooklyn	16,669 47	1,240 51	27,283 38	297,461 40
Manufacturers and Builders	New York	22,632 49	4,175 30	20,639 71	238,481 87
Mechanics and Traders	New Orleans	24,110 00	3,646 60	14,220 47	206,161 21
Mechanics	New Orleans	29,269 15	14,927 64	70,437 17	689,903 63
Michigan Fire and Marine	Detroit	9,463 39	7,343 87	30,852 41	255,458 93
National Fire	New York	14,846 06	2,506 15	14,303 13	229,246 92

National Fire.....	85,312 49	18,727 48	151,205 52	1,172,729 77
New Hampshire Fire.....	35,982 81	18,802 76	33,367 65	616,438 01
Niagara Fire.....	126,450 00	45,548 72	183,777 35	1,761,304 30
North American.....	12,916 53	5,215 12	9,461 93	154,202 07
Oregon Fire and Marine.....	8,995 00	1,504 30	4,232 11	87,376 64
Orient.....	50,974 94	17,824 21	63,214 68	700,381 08
Pacific Fire.....	27,597 40	5,754 13	12,663 37	269,977 51
Pennsylvania Fire.....	36,070 68	27,583 60	49,607 88	1,002,573 74
People's Fire.....	14,442 85	6,486 32	24,559 40	385,280 08
Phoenix.....	286,347 94	59,715 62	330,367 25	3,767,297 31
Phoenix.....	105,124 69	67,672 95	195,756 88	2,338,357 81
Providence-Washington.....	32,206 46	21,303 76	94,618 99	927,103 63
Security.....	39,564 00	5,025 76		558,047 97
Southern.....	19,726 66	6,928 12	17,318 02	292,467 58
Springfield Fire and Marine.....	70,184 25	42,432 96	150,059 80	1,583,161 47
St. Paul.....	47,734 97	18,845 22	46,299 46	972,936 78
Sun Mutual.....	57,407 65	11,166 48	2,000 00	516,269 64
Syndicate.....	9,337 71	2,160 29	9,701 47	92,389 92
Teutonia.....	23,813 41	12,488 04	1,080 75	136,186 07
Traders.....	40,755 66	16,932 95	22,743 02	609,538 47
Union.....	38,088 46	13,789 17	43,606 69	502,631 04
United States Fire.....	18,276 25	5,173 67	19,775 80	178,959 55
Westchester Fire.....	36,407 99	20,127 59	106,548 30	902,858 76
Williamsburg City Fire.....	60,553 60	6,165 77	38,622 71	533,908 10
Totals.....	\$4,132,117 59	\$1,248,576 87	\$4,356,803 79	\$56,266,496 88

TABLE No. 23.

Showing amount of Risks Written, Premiums Received, and amount of Risks in Force on the thirty-first day of December, 1888, with Premiums thereon, of Fire and Fire and Marine Insurance Companies doing business in California—Companies of other States.

NAME.	Location.	RISKS WRITTEN DURING THE YEAR.				
		Fire.	Premiums.	Marine.	Premiums.	Total Premiums.
Alma.....	Hartford.....	\$227,848,439 00	\$2,703,180 38	\$97,925,055 00	\$172,121 04	\$2,875,301 42
Agricultural.....	Watertown, N. Y.....	92,424,094 00	847,285 73	-----	-----	847,285 73
Amazon.....	Cincinnati.....	19,234,040 00	267,214 64	-----	-----	267,214 64
American.....	Newark.....	63,769,982 00	509,106 87	-----	-----	509,106 87
American.....	Boston.....	23,935,010 00	231,984 84	2,054,928 00	39,162 63	271,147 47
American Central.....	St. Louis.....	50,575,759 00	630,051 69	-----	-----	630,051 69
American Fire.....	Philadelphia.....	146,011,488 00	1,774,609 77	-----	-----	1,774,609 77
American Fire.....	New York.....	101,443,298 00	614,719 05	-----	-----	614,719 05
Boylston.....	Boston.....	29,277,300 00	302,953 05	5,707,901 00	39,751 06	342,707 11
Citizens.....	St. Louis.....	6,396,853 00	66,276 45	935,006 00	4,903 20	71,239 65
Citizens.....	New York.....	89,345,141 00	738,698 35	-----	-----	738,698 35
Citizens.....	Cincinnati.....	15,229,761 00	208,492 85	-----	-----	208,492 85
Concordia.....	Milwaukee.....	36,792,856 00	461,827 71	-----	-----	461,827 71
Connecticut Fire.....	Hartford.....	101,112,207 00	1,247,388 41	-----	-----	1,247,388 41
Continental.....	New York.....	276,625,151 00	2,447,630 81	-----	-----	2,447,630 81
Farragut Fire.....	New York.....	20,916,356 00	166,700 43	-----	-----	166,700 43
Fire Association.....	Philadelphia.....	149,155,388 00	1,867,904 85	-----	-----	1,867,904 85
Firemen's.....	Baltimore.....	21,052,924 00	157,521 82	-----	-----	157,521 82
Firemen's.....	Newark.....	36,471,363 00	328,671 07	-----	-----	328,671 07
Franklin Fire.....	Philadelphia.....	52,034,590 00	570,358 12	-----	-----	570,358 12
German.....	Freeport, Ill.....	32,350,850 00	1,524,598 56	-----	-----	1,524,598 56
German-American.....	New York.....	379,116,423 00	3,142,081 96	-----	-----	3,142,081 96
Germania.....	New Orleans.....	23,312,016 00	191,552 63	723,054 00	4,374 79	195,927 42
Germania Fire.....	New York.....	176,519,853 00	1,543,314 48	-----	-----	1,543,314 48
Girard Fire and Marine.....	Philadelphia.....	40,592,786 00	421,003 97	-----	-----	421,003 97
Glen's Falls.....	Glen's Falls, N. Y.....	60,848,752 00	605,588 72	-----	-----	605,588 72
Granite State Fire.....	Portsmouth, N. H.....	27,046,185 00	372,593 14	-----	-----	372,593 14
Hanover Fire.....	New York.....	165,287,207 00	1,406,630 45	-----	-----	1,406,630 45
Hartford Fire.....	Hartford.....	225,181,305 00	2,957,290 92	-----	-----	2,957,290 92
Home.....	New York.....	609,652,189 00	5,174,273 61	2,029,213 00	37,425 62	5,211,799 23
Insurance Co. of North America.....	Philadelphia.....	280,028,825 00	2,694,241 85	255,111,734 00	1,675,116 35	4,369,358 20

Insurance Co. of the State of Pennsylvania.		Philadelphia		38,466,933 00		365,293 46		365,293 46	
Liberty	-----	New York	-----	91,479,632 00	-----	813,762 03	-----	813,762 03	-----
Long Island	-----	Brooklyn	-----	38,262,774 00	-----	269,435 39	-----	269,435 39	-----
Manufacturers and Builders	-----	New York	-----	31,901,282 00	-----	233,297 82	-----	233,297 82	-----
Mechanics and Traders	-----	New Orleans	-----	14,034,573 00	-----	211,493 43	-----	255,862 67	-----
Merchants	-----	Newark	-----	108,862,051 00	-----	941,333 64	-----	941,333 64	-----
Michigan Fire and Marine	-----	Detroit	-----	26,180,524 00	-----	352,298 49	-----	352,298 49	-----
National Fire	-----	New York	-----	18,431,862 00	-----	270,813 86	-----	270,813 86	-----
New Hampshire Fire	-----	Hartford	-----	152,549,546 00	-----	1,641,982 14	-----	1,641,982 14	-----
Niagara Fire	-----	Manchester, N. H.	-----	69,480,389 00	-----	812,322 30	-----	812,322 30	-----
North American	-----	New York	-----	272,382,596 00	-----	2,199,821 30	-----	2,214,332 36	-----
Oregon Fire and Marine	-----	Boston	-----	21,274,488 00	-----	208,838 55	-----	208,838 55	-----
Orient	-----	Portland	-----	71,225,345 00	-----	931,281 97	-----	931,281 97	-----
Pacific Fire	-----	Hartford	-----	33,994,866 00	-----	283,474 78	-----	283,474 78	-----
Pennsylvania Fire	-----	New York	-----	96,512,980 00	-----	1,231,098 89	-----	1,231,098 89	-----
People's Fire	-----	Philadelphia	-----	36,935,697 00	-----	510,576 92	-----	510,576 92	-----
Phoenix	-----	Manchester, N. H.	-----	337,195,050 00	-----	4,212,327 85	-----	4,212,327 85	-----
Phoenix	-----	New York	-----	207,212,298 00	-----	2,538,682 78	-----	2,538,682 78	-----
Providencia-Washington	-----	Hartford	-----	67,657,656 00	-----	788,351 50	-----	788,351 50	-----
Security	-----	Providence, R. I.	-----	43,543,293 00	-----	518,571 30	-----	518,571 30	-----
Southern	-----	New Haven	-----	24,070,580 00	-----	383,988 83	-----	383,988 83	-----
Springfield Fire and Marine	-----	New Orleans	-----	127,455,905 00	-----	1,824,009 50	-----	1,824,009 50	-----
St. Paul	-----	Springfield, Mass.	-----	64,829,929 00	-----	1,012,087 48	-----	1,012,087 48	-----
Sun Mutual	-----	St. Paul, Minn.	-----	35,598,753 00	-----	496,025 00	-----	496,025 00	-----
Syndicate	-----	New Orleans	-----	6,508,237 00	-----	117,444 05	-----	117,444 05	-----
Tenonia	-----	Minneapolis	-----	15,904,068 00	-----	166,932 44	-----	166,932 44	-----
Traders	-----	New Orleans	-----	49,021,370 00	-----	676,211 69	-----	676,211 69	-----
Union	-----	Chicago	-----	30,903,432 00	-----	355,167 53	-----	355,167 53	-----
United States Fire	-----	Philadelphia	-----	22,892,779 00	-----	174,923 25	-----	174,923 25	-----
Weschester Fire	-----	New York	-----	125,300,178 00	-----	1,019,353 97	-----	1,019,353 97	-----
Williamsburg City Fire	-----	New York	-----	83,227,228 00	-----	659,805 55	-----	659,805 55	-----
Totals	-----	Brooklyn	-----	\$6,022,604,757 00	-----	\$62,488,708 12	-----	\$62,488,708 12	-----
	-----		-----		-----	\$644,055,197 00	-----	\$644,055,197 00	-----
	-----		-----		-----	\$3,598,081 52	-----	\$3,598,081 52	-----
	-----		-----		-----	\$66,086,789 64	-----	\$66,086,789 64	-----

TABLE No. 23—Continued.

NAME.	Location.	RISKS IN FORCE DECEMBER 31, 1888.				
		Fire.	Premiums.	Marine.	Premiums.	Total Premiums.
Abna.....	Hartford	\$308,947,169 00	\$3,456,504 18	\$1,230,411 00	\$29,557 41	\$3,686,061 59
Agricultural.....	Watertown, N. Y.	234,345,737 00	2,229,318 88	---	---	2,229,318 88
Amazon.....	Cincinnati	20,601,958 00	281,609 93	---	---	281,609 93
American.....	Newark	73,086,177 00	683,651 20	---	---	683,651 20
American Central.....	Boston	21,680,297 00	230,332 67	2,010,084 00	39,092 70	270,025 37
American Fire.....	St. Louis	60,045,430 00	762,775 63	---	---	762,775 63
American Fire.....	Philadelphia	172,033,201 00	2,375,756 82	---	---	2,375,756 82
Boxston.....	New York	85,938,187 00	588,396 19	---	---	588,396 19
Citizens.....	Boston	31,351,088 00	351,279 81	---	---	363,700 63
Citizens.....	St. Louis	5,971,512 00	75,889 00	292,475 00	12,480 82	76,880 00
Citizens.....	New York	103,729,454 00	887,419 74	---	---	887,419 74
Concordia.....	Cincinnati	8,025,280 00	121,473 03	---	---	121,473 03
Connecticut Fire.....	Milwaukee	44,748,778 00	574,955 85	---	---	574,955 85
Continental.....	Hartford	109,120,083 00	1,338,402 58	---	---	1,338,402 58
Farragut Fire.....	New York	534,415,890 00	5,076,230 59	---	---	5,076,230 59
Fire Association.....	New York	25,969,470 00	202,789 67	---	---	202,789 67
Firemen's.....	Philadelphia	263,351,484 00	4,235,856 13	---	---	4,235,856 13
Firemen's.....	Baltimore	27,947,296 00	162,671 77	---	---	162,671 77
Franklin Fire.....	Newark	45,195,135 00	405,316 27	---	---	405,316 27
German.....	Philadelphia	137,265,205 00	2,298,411 80	---	---	2,298,411 80
German-American.....	Freeport, Ill.	163,712,821 00	3,132,583 66	---	---	3,132,583 66
Germania.....	New York	478,309,249 00	3,601,829 06	---	---	3,601,829 06
Germania Fire.....	New Orleans	14,319,129 00	103,052 16	---	---	103,052 16
Girard Fire and Marine.....	New York	211,259,512 00	1,887,690 94	---	---	1,887,690 94
Glen's Falls.....	Philadelphia	61,833,691 00	782,629 50	---	---	782,629 50
Granite State Fire.....	Glen's Falls, N. Y.	102,438,619 00	1,013,283 56	---	---	1,013,283 56
Hanover Fire.....	Portsmouth, N. H.	24,620,098 00	320,135 04	---	---	320,135 04
Hartford Fire.....	New York	192,240,537 00	1,781,130 25	---	---	1,781,130 25
Home.....	Hartford	369,651,199 00	3,906,873 73	---	---	3,906,873 73
Insurance Co. of North America.....	New York	732,581,869 00	7,229,854 00	1,788,700 00	36,845 00	7,257,699 00
Insurance Co. of the State of Pennsylvania.....	Philadelphia	363,781,336 00	4,619,062 26	15,482,036 00	152,108 27	4,771,170 53
Liberty.....	New York	37,700,072 00	509,309 88	---	---	509,309 88
Long Island.....	New York	67,420,378 00	671,948 97	---	---	671,948 97
Manufacturers and Builders.....	Brooklyn	37,465,514 00	236,685 28	---	---	236,685 28
Mechanics and Traders.....	New York	35,165,708 00	235,291 44	---	---	235,291 44
.....	New Orleans	9,571,783 00	163,534 80	---	---	169,534 80

Merchants	Newark	105,828,285 00	968,454 86	-----	968,454 86
Michigan Fire and Marine	Detroit	23,343,065 00	319,640 98	-----	319,640 98
National Fire	New York	26,264,125 00	238,343 83	-----	238,343 83
National Fire	Hartford	110,258,971 00	1,340,396 17	-----	1,340,396 17
New Hampshire Fire	Manchester, N. H.	73,200,973 00	925,286 51	-----	925,286 51
Niagara Fire	New York	286,115,215 00	2,488,794 47	-----	2,500,719 35
North American	Boston	19,523,318 00	210,863 52	-----	210,863 52
Oregon Fire and Marine	Portland	4,347,117 00	87,635 04	-----	87,635 04
Orient	Hartford	76,574,923 00	950,841 28	-----	950,841 28
Pacific Fire	New York	40,074,620 00	320,348 08	-----	320,348 08
Pennsylvania Fire	Philadelphia	139,217,813 00	2,073,845 50	-----	2,073,845 50
People's Fire	Manchester, N. H.	32,983,120 00	448,524 28	-----	448,524 28
Phoenix	New York	497,416,767 00	7,004,132 39	-----	7,004,132 39
Providence-Washington	Hartford	270,625,744 00	3,185,343 90	-----	3,185,343 90
Security	Providence, R. I.	71,616,240 00	848,170 83	-----	1,009,123 21
Southern	New Haven	35,151,762 00	441,826 22	-----	1,009,123 21
Springfield Fire and Marine	New Orleans	11,989,017 00	254,295 47	-----	500,653 22
St. Paul	Springfield, Mass.	175,278,437 00	2,397,063 36	-----	2,397,063 36
St. Paul	St. Paul, Minn.	92,150,209 00	1,147,449 17	-----	1,249,806 25
Sun Mutual	New Orleans	21,224,041 00	359,033 00	-----	359,188 00
Syndicate	Minneapolis	5,311,704 00	95,994 45	-----	95,994 45
Teutonia	New Orleans	12,008,113 00	140,270 26	-----	140,270 26
Traders	Chicago	46,126,530 00	646,895 15	-----	646,895 15
Union	Philadelphia	31,573,526 00	377,853 41	-----	424,045 88
United States Fire	New York	22,581,979 00	183,718 69	-----	219,479 05
Westchester Fire	New York	149,705,206 00	1,410,168 66	-----	1,414,953 71
Williamsburg City Fire	Brooklyn	90,968,178 00	828,963 26	-----	828,963 26
Totals		\$7,675,902,214 00	\$86,429,168 01	\$34,043,798 00	\$87,120,206 43

TABLE No. 24.

Summary of Assets, Liabilities, Income, Expenditures, etc., and Net Surplus of Fire and Marine Insurance Companies doing business in California on the thirty-first day of December, 1888—Companies of Foreign Countries.

NAME.	Location.	Cash Capital Paid Up.	Total Assets.	Liabilities, Capital not Included.	Total Income.
Atlas	London	\$720,000 00	\$9,419,286 02	\$7,764,137 89	\$984,442 63
British America*	Toronto	841,474 79	841,474 79	491,777 47	609,306 24
Caledonian	Edinburgh	450,000 00	1,932,063 70	378,436 27	689,046 39
City of London Fire*	London	754,273 84	419,558 28	419,558 28	567,590 78
Commercial Union	London	1,250,000 00	13,089,277 23	8,379,658 03	6,046,949 76
Economic Fire	London	357,500 00	400,201 00	190,179 97	174,810 03
General Life and Fire	London	250,000 00	5,723,480 00	5,346,800 00	400,562 67
Guardian Fire and Life	London	5,000,000 00	21,911,715 74	13,513,823 94	2,750,682 40
Hamburg-Bremen	Hamburg	300,000 00	1,565,778 94	917,426 31	523,690 00
Hamburg-Magdeburg	Hamburg	625,000 00	773,890 43	101,843 62	203,018 54
Helvetia Swiss Fire	St. Gall, Switzerland.	400,000 00	1,428,981 61	602,653 52	638,473 49
Imperial Fire	London	3,500,000 00	10,044,636 00	2,389,603 00	4,082,127 00
Lancashire	Manchester	1,364,430 00	7,852,316 69	6,032,294 58	3,086,537 49
Lion Fire	London	560,000 00	1,276,708 00	614,185 00	946,164 00
Liverpool and London and Globe	Liverpool	1,228,200 00	43,416,192 36	30,532,498 28	7,208,240 01
London	London	2,241,375 00	17,611,054 58	11,286,513 31	4,346,703 19
London and Lancashire	Liverpool	926,000 00	4,005,997 95	1,731,245 39	3,045,192 44
Magdeburg Fire	Magdeburg	750,000 00	3,826,577 33	1,861,097 00	3,024,726 12
Manchester Fire	Manchester	500,000 00	1,174,954 75	456,970 20	856,254 00
National	Dublin	500,000 00	2,732,672 90	1,928,469 00	1,011,817 00
New Zealand	Auckland	1,000,000 00	2,714,181 00	953,856 00	1,345,577 00
North British and Mercantile	London	3,125,000 00	14,545,043 30	3,469,413 90	6,888,412 58
North German Fire	Hamburg	375,000 00	833,321 22	286,247 53	480,688 90
Northern	London	1,500,000 00	18,722,657 91	13,355,354 85	4,893,923 31
Norwich Union	Norwich, England	600,000 00	4,969,858 81	2,061,849 42	3,284,320 58
Phoenix	London	359,593 75	7,430,535 63	2,841,140 85	4,657,187 55
Prussian National	Stettin	562,500 00	1,620,279 08	604,229 33	611,413 17
Queen*	Liverpool	1,447,725 00	2,133,800 77	1,288,362 85	1,462,984 10
Royal	Liverpool	1,447,725 00	33,577,100 68	21,450,845 32	5,696,175 62
Scania	Malmö, Sweden	707,645 17	394,363 86	394,363 86	455,615 58
Scottish Union and National*	Edinburgh	1,525,910 53	383,135 08	383,135 08	525,819 91
South British Fire and Marine	Auckland	646,280 00	1,410,015 00	713,541 00	1,481,998 00
Straits Fire	Singapore	400,000 00	563,979 69	56,175 63	163,360 79
Sun Fire*	London	1,926,203 14	1,926,203 14	1,034,532 93	1,161,070 83

Svea	Gothenburg, Sweden	533,333 33	3,820,018 97	2,905,032 77	1,931,708 75
Transatlantic Fire	Hamburg	300,000 00	1,311,899 84	603,409 57	433,959 24
Union Fire and Marine	Christchurch, New Zealand	500,000 00	970,770 87	256,990 35	490,083 67
United Fire*	Manchester	-----	1,092,069 09	749,832 78	1,285,798 63
Western*	Toronto	-----	1,061,345 32	639,095 56	1,193,526 22
Totals	-----	\$32,652,506 08	\$251,318,709 88	\$138,987,290 64	\$79,706,929 30

* United States Branch statement.

TABLE No. 24—Continued.

NAME.	Location.	Total Expenditures.	Losses Incurred during the Year.	Net Surplus.
Atlas	London	\$922,059 05	\$504,916 00	\$825,128 13
British America*	Toronto	580,521 71	444,018 97	349,697 32
Caledonian	Edinburgh	620,078 08	311,011 09	1,104,297 43
City of London Fire*	London	535,746 02	336,196 30	334,715 56
Commercial Union	London	5,598,713 24	2,934,294 00	4,059,619 20
Economic Fire	London	197,241 76	127,634 44	---
General Life and Fire	London	2,520,529 46	315,000 00	126,590 00
Guardian Fire and Life	Hamburg	553,831 95	1,390,520 00	3,397,891 80
Hamburg-Bremen	Hamburg	154,808 03	292,972 86	348,352 63
Hamburg-Magdeburg	St. Gall, Switzerland	547,116 55	92,675 30	47,046 81
Helvetia Swiss Fire	London	4,021,440 00	235,824 85	426,328 09
Imperial Fire	London	2,925,266 42	2,302,326 00	4,155,033 00
Lancashire	Manchester	883,175 00	1,319,905 00	455,142 11
Lion Fire	London	6,754,151 31	574,256 00	102,454 00
Liverpool and London and Globe	Liverpool	3,824,521 54	3,680,162 35	11,655,494 08
London	London	2,938,669 93	1,917,870 43	4,083,166 27
London and Lancashire	Liverpool	1,520,296 29	1,520,296 29	1,348,752 56
Magdeburg Fire	Magdeburg	2,662,633 19	1,710,744 10	1,215,480 33
Manchester Fire	Manchester	925,937 30	494,800 00	217,984 55
National	Dublin	1,002,352 00	609,665 00	304,203 90
New Zealand	Auckland	1,300,865 00	800,865 00	700,325 00
North British and Mercantile	London	6,575,039 75	3,681,340 45	7,950,629 40
North German Fire	Hamburg	477,029 61	636,469 26	172,073 69
Northern	London	4,287,653 92	1,726,722 56	3,896,703 06
Norwich Union	Norwich, England	2,975,076 85	1,746,772 35	2,248,009 39
Phoenix	London	4,429,301 15	2,589,567 23	4,229,801 03
Prussian National	Stettin	476,413 17	452,191 72	453,549 75
Queen*	Liverpool	1,295,732 68	832,222 69	845,437 92
Royal	Liverpool	5,153,838 72	2,765,887 64	10,678,530 36
Scania	Malmö, Sweden	197,931 28	475,352 13	---
Scottish Union and National*	Edinburgh	335,651 20	263,352 93	1,142,775 45
South British Fire and Marine	Auckland	1,339,760 00	983,270 00	50,191 00
Straths Fire	Singapore	143,478 25	81,064 22	47,804 06
Sun Fire*	London	1,012,768 02	642,582 00	801,670 21
Svea	Gothenburg, Sweden	2,457,141 21	898,648 39	381,652 87
Transatlantic Fire	Hamburg	419,844 14	278,245 73	408,400 27
Union Fire and Marine	Christchurch, New Zealand	439,104 90	276,386 58	213,780 52

United Fire*	Manchester	1,355,764 34	963,075 00	342,236 31
Western*	Toronto	1,154,522 45	773,000 06	422,249 76
Totals .....	.....	\$74,218,629 18	\$42,062,714 92	\$69,773,110 82

*United States Branch statement.

TABLE No. 25.

Showing the Assets of the Fire and Fire and Marine Insurance Companies doing business in California on the thirty-first day of December, 1888.—Companies of Foreign Countries.

NAME.	Location.	Real Estate.	Loans on Bonds and Mortgages.	Stocks and Bonds Owned by the Company.	Collateral Loans.	Cash in Office and Banks.
Atlas	London	\$306,204 81	\$2,182,701 86	\$1,238,574 27	---	\$264,777 27
British America *	Toronto	---	---	707,746 01	---	46,157 95
Caledonian	Edinburgh	826,858 87	415,750 00	459,889 33	\$85,993 00	1,762 73
City of London Fire *	London	---	---	625,640 00	---	45,230 63
Commercial Union	London	1,396,518 37	125,010 86	3,774,667 06	169,771 61	1,244,218 36
Economic Fire	London	---	---	302,184 40	---	15,055 34
General Life and Fire	London	817,005 00	1,498,800 00	2,924,935 00	---	77,500 00
Guardian Fire and Life	London	157,575 00	6,309,320 17	10,226,939 00	2,854,862 77	512,239 79
Hamburg-Brennen	Hamburg	72,723 41	21,625 00	1,265,841 75	30,000 00	71,117 85
Hamburg-Magdeburg	Hamburg	56,089 94	225,187 50	381,362 93	---	31,431 49
Helvetia Swiss Fire.	St. Gall, Switzerland	48,000 00	630,139 70	200,550 38	42,750 00	407,626 47
Imperial Fire	London	1,657,786 00	180,750 00	7,174,338 00	---	89,431 00
Lancashire	Manchester	298,140 60	2,602,183 51	3,586,294 01	221,843 29	290,863 08
Lion Fire.	London	120,000 00	245,970 00	528,000 00	9,500 00	92,953 00
Liverpool and London and Globe.	Liverpool	4,757,257 04	8,610,553 69	22,706,911 06	1,976,518 02	2,460,181 42
London	London	---	10,166,243 64	5,627,343 47	---	455,630 06
London and Lancashire	Liverpool	323,902 52	42,750 00	3,089,373 31	27,950 00	136,564 96
Magdeburg Fire	Magdeburg	386,167 50	1,009,284 76	1,433,084 66	---	485,298 71
Manchester Fire	Manchester	163,263 50	211,600 00	500,739 00	21,970 00	28,330 43
National	Dublin	1,490,005 00	786,395 00	1,339,937 00	211,900 00	21,364 00
New Zealand	Auckland	1,711,603 50	344,157 00	419,186 00	139,011 00	22,069 30
North British and Mercantile	London	103,640 02	210,000 00	10,539,658 12	---	592,647 20
North German Fire.	Hamburg	1,357,510 31	155,250 00	298,973 28	---	214,902 12
Northern	London	182,000 00	1,764,948 50	11,065,870 54	2,677,483 77	273,961 52
Norwich Union	Norwich, England	790,117 06	859,386 56	3,069,264 46	---	839,310 54
Phoenix	London	---	---	4,973,574 58	---	120,846 06
Prussian National	Stettin	50,000 00	725,887 50	546,589 97	10,750 00	71,682 27
Queen *	Liverpool	30,000 00	---	1,816,440 00	---	245,407 14
Royal	Liverpool	2,950,067 50	7,293,493 23	16,384,320 50	4,971,894 75	842,892 50
Scania	Malmö, Sweden	---	544,571 35	39,433 33	32,876 54	43,967 94
Scottish Union and National *	Edinburgh	---	573,590 00	708,815 55	---	104,291 61
South British Fire and Marine	Auckland	432,200 00	53,690 00	453,865 00	11,780 00	30,030 00
Straits Fire	Singapore	---	278,966 14	740 00	---	201,039 74

Sun Fire*	London	30,000 00	900,000 00	644,500 00	-----	171,859 66
Svea	Gothenburg, Sweden	370,877 55	1,528,010 40	1,008,073 90	466,128 70	175,140 27
Transatlantic Fire	Hamburg	87,500 00	-----	746,952 07	50,000 00	252,414 35
Union Fire and Marine	Christchurch, New Zealand	22,500 00	457,422 04	9,296 88	-----	354,694 58
United Fire *	Manchester	-----	-----	818,600 00	-----	138,776 40
Western*	Toronto	-----	-----	832,202 50	-----	59,629 13
Totals	-----	\$21,210,138 50	\$51,078,109 81	\$122,701,597 32	\$14,815,010 23	\$11,613,395 57

* United States Branch statement.

TABLE No. 25—Continued.

NAME.	Location.	Interest Due and Accrued.	Premiums in Course of Collection.	Bills Receivable, not Matured, Taken for Fire and Marine Risks.	All Other Assets.	Total Assets.
Atlas	London	\$26,450 91	\$286,431 73	-----	\$5,114,125 17	\$9,419,246 02
British America	Toronto	5,915 03	81,655 80	-----	-----	841,474 79
Caledonian	Edinburgh	23,165 00	90,062 75	-----	29,482 46	1,932,663 70
City of London Fire*	London	-----	82,758 75	-----	644 46	754,273 84
Commercial Union	London	4,405 81	1,085,000 23	\$31,887 12	5,857,707 81	13,680,277 23
Economic Fire	London	2,840 52	101,211 14	-----	36,470 22	460,201 00
General Life and Fire	London	90,000 00	30,000 00	2,439 38	285,000 00	5,723,480 00
Guardian Fire and Life	London	282,272 46	426,736 75	31,810 68	1,109,977 12	21,911,715 74
Hamburg-Bremen	Hamburg	-----	93,160 47	4,390 12	920 34	1,565,778 94
Hamburg-Magdeburg	Hamburg	3,480 93	33,103 27	-----	484 37	773,890 43
Helvetia Swiss Fire	St. Gall, Switzerland	13,734 91	123,158 70	-----	5,441 45	1,428,981 61
Imperial Fire	London	-----	713,157 00	45,461 00	183,113 00	10,044,636 00
Lancashire	Manchester	63,975 85	769,250 13	18,097 47	1,718 75	7,852,366 69
Lion Fire	London	10,855 00	134,483 00	6,789 00	128,158 00	1,276,708 00
Liverpool and London and Globe	Liverpool	342,002 33	1,033,418 36	-----	1,509,351 04	43,416,192 36
London	London	19,131 91	535,146 62	-----	8,113 10	17,611,054 58
London and Lancashire	Liverpool	45,430 90	319,986 67	19,947 40	92 19	4,005,997 95
Magdeburg Fire	Magdeburg	18,132 69	234,919 03	-----	256,589 98	3,823,577 33
Manchester Fire	Manchester	11,239 47	237,751 85	-----	1,174,954 75	1,174,954 75
National	Dublin	35,306 90	123,115 00	-----	60 50	2,732,672 90
New Zealand	Auckland	11,673 00	283,941 00	2,384 00	1,755 00	2,714,181 00
North British and Mercantile	London	11,933 20	108,904 80	103,783 58	1,296,812 90	14,545,043 30
North German Fire	Hamburg	-----	60,555 80	-----	-----	833,321 22
Northern	London	220,984 33	75,218 15	101,275 02	1,185,408 77	18,722,657 91
Norwich Union	Norwich, England	31,709 93	644,435 91	38,137 97	-----	4,993,858 81
Phoenix	London	29,773 95	553,313 74	92,083 08	11,410 60	7,430,535 63
Prussian National	Stettin	1,743 12	190,890 87	-----	62,735 35	1,620,279 08
Queen*	Liverpool	8,283 33	33,670 30	-----	-----	2,133,800 77
Royal	Liverpool	352,150 31	582,281 89	-----	-----	33,577,100 68
Scania	Malmo, Sweden	8,753 54	12,423 14	-----	25,619 33	707,645 17
Scottish Union and National *	Edinburgh	14,314 91	58,350 32	-----	5,788 14	1,525,910 53
South British Fire and Marine	Auckland	17,615 00	369,655 00	12,055 00	29,135 00	1,410,015 00
Straits Fire	Singapore	8,562 01	14,731 80	-----	-----	503,979 69
Sun Fire*	London	23,753 79	146,592 01	-----	497 68	1,926,203 14
Svea	Gothenburg, Sweden	13,349 87	23,528 00	154,863 32	80,046 96	3,820,018 97
Transatlantic Fire	Hamburg	-----	151,840 65	-----	23,102 77	1,311,809 84

Union Fire and Marine.....	Christchurch, New Zealand ..	15,022 38	103,424 33	7,839 06	571 60	970,770 87
United Fire *	Manchester	-----	134,692 09	-----	-----	1,092,069 09
Western *	Toronto	-----	122,787 48	46,726 21	-----	1,081,345 32
Totals	-----	\$1,767,960 29	\$10,192,165 13	\$719,949 41	\$17,220,303 62	\$251,318,709 88

* United States Branch statement.

TABLE No. 26.

Showing the various items composing the Liabilities, except Capital Stock, of Fire and Marine Insurance Companies doing business in California on the thirty-first day of December, 1888—Companies of Foreign Countries.

NAME.	Location.	Losses Adjusted.	Losses Unadjusted.	Losses Restited.	Cash Dividends Remaining Unpaid.	Fire Reinsurance.
Atlas.....	London.....		\$98,563 00		\$51,777 13	\$476,969 58
British America*.....	Toronto.....	\$9,812 01	48,723 48	\$13,075 00		378,190 04
Caledonian.....	Edinburgh.....		42,851 42		7,951 13	319,264 41
City of London Fire*.....	London.....	21,109 46	32,518 50	4,500 00		346,185 05
Commercial Union.....	London.....	462,275 00			721 25	1,314,329 59
Economic Fire.....	London.....	45,240 00				127,513 51
General Life and Fire.....	London.....	143,915 00			15,820 00	226,769 55
Guardian Fire and Life.....	London.....	267,035 00			33,910 06	1,094,000 00
Hamburg-Bremen.....	Hamburg.....	28,233 00			33 75	849,860 78
Hamburg-Magdeburg.....	Hamburg.....		13,300 00		75 00	88,468 62
Helvetia Swiss Fire.....	St. Gall, Switzerland.....	67,152 91				287,436 45
Imperial Fire.....	London.....	693,040 00			12,668 00	1,498,100 00
Lancashire.....	Manchester.....	413,950 00			116,586 00	1,426,558 15
Lion Fire.....	London.....		109,258 00	7,042 00	841 00	473,891 00
Liverpool and London and Globe.....	Liverpool.....	613,300 00			13,940 67	4,534,693 62
London.....	London.....	331,600 89				1,007,149 16
London and Lancashire.....	Liverpool.....	30,635 15	190,428 00	26,250 00	1,104 37	1,453,608 01
Magdeburg Fire.....	Magdeburg.....		329,983 79		897 25	1,420,076 70
Manchester Fire.....	Manchester.....		149,625 00		385 25	272,909 95
National.....	Dublin.....	30,123 00			9,065 00	488,393 00
New Zealand.....	Auckland.....		247,240 00			392,373 00
North British and Mercantile.....	London.....	677,392 80			18,126 33	2,137,091 65
North German Fire.....	Hamburg.....	37,157 25				243,855 48
Northern.....	London.....	288,492 58			7,403 15	1,538,957 24
Norwich Union.....	Norwich, England.....	307,596 62			2,295 50	1,715,481 95
Phoenix.....	London.....	619,615 00			2,340 00	2,219,185 85
Prussian National.....	Stettin.....		18,750 00	5,750 00	165 00	477,647 25
Queen*.....	Liverpool.....	55,696 14	50,392 69	27,718 71		1,139,792 54
Royal.....	Liverpool.....	402,551 73			16,580 62	3,644,895 17
Scania.....	Malmo, Sweden.....		6,636 67		295 46	73,014 77
Scottish Union and National*.....	Edinburgh.....	15,000 00		9,000 00		326,545 81
South British Fire and Marine.....	Auckland.....	22,321 26	122,600 00		395 00	419,261 00
Straits Fire.....	Singapore.....				212 59	30,000 00
Sun Fire*.....	London.....	37,973 00	47,062 00	10,096 00		898,672 46

Svea	Gothenburg, Sweden	73,333 33	-----	-----	-----	372,537 26
Transatlantic Fire	Hamburg	70,628 25	-----	-----	-----	201,245 36
Union Fire and Marine	Christchurch, N. Z.	29,175 00	-----	-----	162 00	107,792 50
United Fire*	Manchester	119,384 00	-----	-----	3,751 73	596,775 61
Western*	Toronto	73,823 19	-----	4,600 00	-----	467,270 31
Totals	-----	\$5,899,228 24	\$1,596,355 88	\$108,031 71	\$317,443 24	\$25,086,762 38

* United States Branch statement.

TABLE No. 26—Continued.

NAME.	Location.	Marine Reinsurance.	Liability under Life Department.	All Other Claims.	Total Liabilities.	Net Surplus.
Atlas.....	London.....	.....	\$7,117,495 43	\$19,332 75	\$7,764,137 89	\$935,138 13
British America*.....	Toronto.....	\$24,510 14	.....	17,466 80	491,777 47	349,697 32
Caledonian.....	Edinburgh.....	.....	.....	3,389 31	378,456 27	1,104,207 43
City of London Fire*.....	London.....	.....	.....	15,245 27	419,558 28	334,715 56
Commercial Union.....	London.....	790,000 00	5,726,216 20	86,115 99	8,379,658 03	4,659,619 20
Economic Fire.....	London.....	.....	.....	17,426 46	190,179 97	.....
General Life and Fire.....	London.....	.....	4,920,885 45	39,500 00	5,346,890 00	126,590 00
Guardian Fire and Life.....	London.....	.....	12,032,308 29	86,480 59	13,513,823 94	3,397,891 80
Hamburg-Bremen.....	Hamburg.....	.....	.....	917,426 31	348,352 63	348,352 63
Hamburg-Magdeburg.....	Hamburg.....	.....	.....	39,298 78	101,843 62	47,046 81
Helvetia Swiss Fire.....	St. Gall, Switzerland.....	.....	.....	248,064 16	602,053 52	426,328 09
Imperial Fire.....	London.....	.....	.....	185,855 00	2,389,603 00	4,155,033 00
Lancashire.....	Manchester.....	.....	4,075,200 43	.....	6,032,294 58	455,142 11
Lion Fire.....	London.....	.....	.....	23,153 00	614,185 00	102,454 00
Liverpool and London and Globe.....	Liverpool.....	.....	24,630,098 29	740,465 70	30,532,498 28	11,655,494 08
London.....	London.....	337,020 00	9,498,412 93	112,330 33	11,286,513 31	4,083,166 27
London and Lancashire.....	Liverpool.....	.....	.....	29,219 86	1,731,245 39	1,348,752 56
Magdeburg Fire.....	Magdeburg.....	.....	.....	110,139 26	1,861,097 00	1,215,480 33
Manchester Fire.....	Manchester.....	.....	.....	34,050 00	450,970 20	217,984 55
National.....	Dublin.....	.....	1,383,693 00	17,195 00	1,928,469 00	304,203 90
New Zealand.....	Auckland.....	145,089 00	.....	169,154 00	953,856 00	760,325 00
North British and Mercantile.....	London.....	.....	.....	636,803 12	3,469,413 90	7,950,629 40
North German Fire.....	Hamburg.....	.....	.....	5,234 80	286,247 53	172,073 69
Northern.....	London.....	.....	11,370,891 50	150,210 38	13,355,954 85	3,866,703 06
Norwich Union.....	Norwich, England.....	.....	.....	36,475 35	2,061,849 42	2,248,009 39
Phoenix.....	London.....	.....	.....	.....	2,841,140 85	4,229,801 03
Prussian National.....	Stettin.....	5,795 46	.....	96,121 92	604,229 33	453,549 75
Queen.....	Liverpool.....	.....	17,083,985 00	14,762 77	1,288,362 85	845,437 92
Royal.....	Liverpool.....	.....	213,327 46	302,832 80	21,450,845 32	10,678,530 36
Scania.....	Malmö, Sweden.....	.....	.....	101,059 50	394,363 86	.....
Scottish Union and National*.....	Edinburgh.....	136,540 00	.....	10,268 01	383,135 08	1,142,775 45
South British Fire and Marine.....	Auckland.....	.....	.....	34,085 00	713,541 00	50,194 00
Straits Fire.....	Singapore.....	.....	.....	25,963 04	56,175 63	47,804 06
Sun Fire*.....	London.....	.....	.....	40,729 47	1,034,532 93	891,670 21
Svea.....	Gothenburg, Sweden.....	.....	2,170,831 60	282,330 58	2,905,032 77	381,652 87
Transatlantic Fire.....	Hamburg.....	.....	.....	331,373 96	603,409 57	408,400 27

Union Fire and Marine.....	Christchurch, N. Z.....	49,945 81	-----	66,325 31	256,990 35	213,780 52
United Fire*	Manchester.....	77,386 31	-----	33,673 17	749,832 78	342,286 31
Western*.....	Toronto.....		-----	16,015 75	639,095 56	422,249 76
Totals.....		\$1,566,286 42	\$100,229,435 58	\$4,183,747 19	\$138,987,290 64	\$69,773,110 82

* United States Branch statement.

TABLE No. 27.

Showing the various items composing the Incomes of Fire and Marine Insurance Companies doing business in California on the thirty-first day of December, 1888—Companies of Foreign Countries.

NAME.	Location.	Fire Premiums.	Marine Premiums.	Life Premiums.	Interest and Dividends from all Sources.	From all Other Sources.	Total Income.
Atlas	London	\$897,768 81	-----	-----	\$70,236 84	\$16,436 98	\$984,442 63
British America*	Toronto	516,757 49	\$65,793 72	-----	26,755 03	-----	609,306 24
Caledonian	Edinburgh	622,854 46	-----	-----	76,137 55	54 38	699,046 39
City of London Fire*	London	549,570 00	-----	-----	17,550 00	470 78	567,590 78
Commercial Union	London	3,871,330 70	890,587 95	\$903,173 41	251,325 20	150,532 50	6,066,949 76
Economic Fire	London	165,425 48	-----	-----	9,339 80	44 75	174,810 03
General Life and Fire	London	450,562 67	-----	-----	10,000 00	-----	460,562 67
Guardian Fire and Life	London	2,430,776 70	-----	-----	319,905 79	-----	2,750,682 49
Hamburg-Bremen	Hamburg	476,762 44	-----	-----	46,898 16	-----	523,660 60
Hamburg-Magdeburg	Hamburg	183,843 52	-----	-----	22,175 02	-----	206,018 54
Helvetia Swiss Fire	St. Gall, Switzerland	595,099 36	-----	-----	43,374 13	-----	638,473 49
Imperial Fire	London	3,754,747 00	-----	-----	323,325 00	4,055 00	4,082,127 00
Lancashire	Manchester	2,970,760 51	-----	-----	115,776 98	-----	3,086,537 49
Lion Fire	London	910,642 00	-----	-----	31,473 00	4,049 00	946,164 00
Liverpool and London and Globe	Liverpool	6,432,078 31	-----	-----	776,161 70	-----	7,208,240 01
London	London	1,713,111 72	1,206,234 52	770,384 56	656,372 39	-----	4,346,703 19
London and Lancashire	Liverpool	2,920,387 29	110,234 64	-----	110,234 64	14,570 51	3,045,192 44
Magdeburg Fire	Magdeburg	2,857,450 99	-----	-----	86,965 33	80,309 80	3,024,726 12
Manchester Fire	Manchester	818,728 38	-----	-----	29,102 62	8,423 00	856,254 00
National	Dublin	976,045 00	-----	-----	33,877 00	1,895 00	1,011,817 00
New Zealand	Auckland	726,837 00	520,392 00	-----	58,533 00	39,815 00	1,345,577 00
North British and Mercantile	London	6,411,274 94	-----	-----	471,671 06	5,466 58	6,888,412 58
North German Fire	Hamburg	453,012 34	-----	-----	27,676 56	-----	480,688 90
Northern	London	3,077,914 48	-----	1,015,409 27	707,637 02	95,902 54	4,806,923 31
Norwich Union	Norwich, England	3,145,535 48	-----	-----	129,072 60	9,712 50	3,284,320 58
Phoenix	London	4,415,906 80	-----	-----	241,280 75	-----	4,657,187 55
Prussian National	Stettin	534,991 23	22,939 54	-----	53,402 40	-----	611,413 17
Queen*	Liverpool	1,393,909 87	-----	-----	64,022 27	5,051 96	1,462,984 10
Royal	Liverpool	5,191,375 00	-----	-----	474,800 62	-----	5,666,175 62
Scania	Malmo, Sweden	155,033 87	-----	241,883 23	25,095 99	33,002 49	455,615 58
Scottish Union and National*	Edinburgh	473,623 08	-----	-----	53,796 83	-----	526,919 91
South British Fire and Marine	Auckland	919,795 00	515,813 00	-----	29,845 00	16,525 00	1,481,998 00
Stratts Fire	Singapore	131,863 59	-----	-----	31,370 20	127 00	1,63,360 79

Sun Fire*	London	1,102,063 92	-----	-----	59,006 91	-----	1,161,070 83
Svea	Gothenburg, Sweden	1,160,419 63	-----	-----	339,623 42	18,743 89	1,931,708 75
Transatlantic Fire	Hamburg	397,296 90	-----	-----	27,897 26	8,765 08	433,959 24
Union Fire and Marine	Christchurch, New Zealand	247,462 42	-----	-----	29,157 08	2,461 00	490,083 67
United Fire*	Manchester	1,254,253 19	-----	211,003 17	31,545 44	-----	1,285,798 63
Western*	Toronto	794,646 29	-----	368,315 29	30,564 64	-----	1,193,526 22
Totals	-----	\$66,101,317 86	\$3,343,772 28	\$5,801,099 19	\$5,944,325 23	\$516,414 74	\$79,706,929 30

* United States Branch statement.

TABLE No. 28.

Showing the various items composing the Expenditures of Fire and Fire and Marine Insurance Companies doing business in California on the thirty-first day of December, 1888—Companies of Foreign Countries.

NAME.	Location.	Fire Losses.	Marine Losses.	Life Expenses.	Dividends.	Brokerage and Commission.
Atlas	London	\$486,763 80			\$150,000 00	\$170,197 75
British America*	Toronto	393,438 48	\$29,781 05			105,552 35
Caledonian	Edinburgh	311,011 09			94,500 00	110,924 75
City of London Fire*	London	334,595 49				102,781 50
Commercial Union	London	2,311,354 14	668,852 12	\$771,713 16	281,310 00	606,393 64
Economic Fire	London	95,249 44				30,057 47
General Life and Fire	London	315,000 00				80,000 00
Guardian Fire and Life	London	1,390,520 63			350,000 00	423,941 23
Hamburg-Bremen	Hamburg	79,023 86			45,225 75	124,498 61
Hamburg-Magdeburg	Hamburg	79,375 30			31,267 50	
Helvetia Swiss Fire	St. Gall, Switzerland	265,824 85			96,000 00	93,598 51
Imperial Fire	London	2,302,326 00			480,000 00	735,878 00
Lancashire	Manchester	1,792,834 98			204,739 50	498,801 25
Lion Fire	London	574,256 00				176,461 00
Liverpool and London and Globe	Liverpool	3,680,162 35			798,330 00	1,014,035 96
London	London	855,501 14	1,062,369 29	675,933 97	448,275 00	318,612 04
London and Lancashire	Liverpool	1,761,855 56			165,750 00	581,927 08
Magdeburg Fire	Magdeburg	1,710,744 10			235,000 00	418,633 37
Manchester Fire	Manchester	607,074 90			50,070 50	172,650 90
National	Dublin	639,495 00			49,680 00	230,064 00
New Zealand	Auckland	420,776 00	380,089 00		150,000 00	41,234 00
North British and Mercantile	London	3,640,144 38			875,000 00	1,121,372 02
North German Fire	Hamburg	295,309 74			37,500 00	89,903 00
Northern	London	1,818,865 92			382,327 25	515,896 73
Norwich Union	Norwich, England	1,725,055 42		703,985 75	221,300 00	629,616 14
Phoenix	London	2,661,127 23			453,735 00	969,541 94
Prussian National	Stettin	255,642 12	11,778 46			123,035 99
Queen*	Liverpool	861,891 65				212,248 95
Royal	Liverpool	2,705,887 64		8,000 00	723,862 50	
Scania	Malmö, Sweden	112,793 04				39,283 70
Scottish Union and National*	Edinburgh	253,784 27				77,953 46
South British Fire and Marine	Auckland	587,555 00	396,050 00		52,200 00	128,345 00
Straits Fire	Singapore	81,064 22			19,875 15	15,680 57
Sun Fire*	London	647,089 08				185,242 84

Svea.....	898,648 39	-----	407,448 17	32,000 00	299,177 99
Transatlantic Fire.....	254,617 77	-----	-----	33,910 00	9,660 71
Union Fire and Marine	121,191 56	-----	-----	50,539 77	48,954 21
United Fire*	1,014,392 00	-----	-----	-----	289,449 35
Western*	516,204 90	-----	-----	-----	224,874 16
Totals	\$39,172,447 56	\$2,948,227 42	\$2,027,081 05	\$6,514,457 92	\$10,957,080 17

* United States Branch statement.

TABLE No. 28—Continued.

NAME.	Location.	Office Salaries.	Taxes.	All Other Expenditures.	Total Expenditures.
Atlas.....	London.....	\$115,097 41	\$15,091 30	\$24,321 90	\$922,059 05
British America*.....	Toronto.....	12,323 03			580,521 71
Caledonian.....	Edinburgh.....	60,545 62		40,041 54	620,078 08
City of London Fire*.....	London.....	41,588 85	19,582 36	37,197 82	535,746 02
Commercial Union.....	London.....	947,988 27		11,101 91	5,598,713 24
Economic Fire.....	London.....	42,788 10	1,867 00	27,279 75	197,241 76
General Life and Fire.....	London.....	87,500 00	300 00		482,860 00
Guardian Fire and Life.....	London.....	355,944 41		123 16	2,520,529 46
Hamburg-Bremen.....	Hamburg.....	24,746 22	26,337 51		533,831 95
Hamburg-Magdeburg.....	Hamburg.....	44,225 23			154,808 03
Helvetia Swiss Fire.....	St. Gall, Switzerland.....	41,465 16	12,236 16	37,991 87	547,116 55
Imperial Fire.....	London.....	151,859 00		351,377 00	4,021,440 00
Lancashire.....	Manchester.....	391,546 21	37,344 48		2,925,263 42
Lion Fire.....	London.....	67,311 00	14,033 00	51,114 00	883,175 00
Liverpool and London and Globe.....	Liverpool.....	464,778 71	119,867 35	676,976 94	6,754,151 31
London.....	London.....	261,823 60	36,012 87	165,993 63	3,824,521 54
London and Lancashire.....	Liverpool.....	313,813 17	41,152 51	74,171 61	2,938,469 93
Magdeburg Fire.....	Magdeburg.....	175,636 75	22,537 86	100,081 11	2,662,633 19
Manchester Fire.....	Manchester.....	60,683 00	5,278 50	30,179 50	925,937 30
National.....	Dublin.....	61,595 00		918 00	1,002,352 00
New Zealand.....	Auckland.....	175,004 00	11,038 00	122,724 00	1,300,865 00
North British and Mercantile.....	London.....	906,023 35	27,500 00	5,000 00	6,575,039 75
North German Fire.....	Hamburg.....	54,316 87			477,029 61
Northern.....	London.....	581,223 38	60,541 15	164,813 74	4,287,653 92
Norwich Union.....	Norwich, England.....	185,512 83	39,096 37	174,496 09	2,975,076 85
Phoenix.....	London.....	379,949 12	21,104 06	3,843 80	4,429,301 15
Prussian National.....	Stettin.....	34,585 00	6,582 75	44,838 85	476,413 17
Queen*.....	Liverpool.....	92,406 01	47,103 94	81,992 13	1,295,732 08
Royal.....	Liverpool.....	1,664,088 58			5,153,838 72
Scania.....	Malmo, Sweden.....	15,779 23	1,682 81	20,392 50	197,931 28
Scottish Union and National*.....	Edinburgh.....	28,285 00	14,851 58	20,776 89	395,651 20
South British Fire and Marine.....	Auckland.....	165,270 00	14,010 00	2,330 00	1,339,760 00
Straits Fire.....	Singapore.....	26,439 41		418 90	143,478 25
Sun Fire*.....	London.....	60,130 61			
Svea.....	Gothenburg, Sweden.....	123,558 66	21,448 23	98,837 26	1,012,768 02
Transatlantic Fire.....	Hamburg.....	44,225 98	11,722 92	384,585 08	2,157,141 21
Union Fire and Marine.....	Christchurch, New Zealand.....	85,924 57	12,736 09	62,693 59	419,844 14
			3,189 08	3,225 69	439,104 90

United Fire*	Manchestor	51,922 99	-----	-----	-----	1,355,764 34
Western*	Toronto	25,625 00	-----	26,610 50	81,924 01	1,154,522 45
Totals	-----	\$8,423,649 33	-----	\$673,923 46	\$2,901,762 27	\$74,218,629 13

* United States Branch statement.

TABLE No. 29.

Showing amount of Risks Written, Premiums Received, and amount of Risks in Force on the thirty-first day of December, 1888, with Premiums thereon, of Fire and Marine Insurance Companies doing business in California—Companies of Foreign Countries.

NAME.	Location.	RISKS WRITTEN DURING THE YEAR.			
		Fire.	Premiums.	Marine.	Premiums.
Atlas	London	\$706,326,000 00	\$1,149,489 00		\$1,149,489 00
British America*	Toronto	50,032,419 00	623,099 89		698,571 05
Caledonian	Edinburgh	327,319,705 00	737,128 00	\$14,889,461 00	737,128 00
City of London Fire*	London	53,274,841 00	674,344 71		674,344 71
Commercial Union	London	1,080,204,045 00	4,841,066 50	179,229,355 00	6,204,621 50
Economic Fire	London	97,649,625 00	312,162 64		312,162 64
General Life and Fire	London	487,500,000 00	550,000 00		550,000 00
Guardian Fire and Life	London	768,582,475 00	2,430,775 00		2,430,775 00
Hamburg-Bremen	Hamburg	225,637,088 00	1,269,419 98		1,269,419 98
Hamburg-Magdeburg	Hamburg	71,832,781 00	341,090 68		341,090 68
Helvetia Swiss Fire	St. Gall, Switzerland	600,613,617 00	1,055,779 63		1,055,779 63
Imperial Fire	London	1,377,974,120 00	4,295,640 00		4,295,640 00
Lancashire	Manchester	1,007,085,146 00	3,201,255 41		3,201,255 44
Lion Fire	London	265,676,990 00	1,177,481 00		1,177,481 00
Liverpool and London and Globe	Liverpool	2,027,968,125 00	8,543,889 03		8,543,889 03
London	London	559,551,485 00	1,713,111 72	145,039,710 00	3,071,511 63
London and Lancashire	Liverpool	878,030,310 00	3,099,800 91		3,099,800 91
Magdeburg Fire	Magdeburg	2,022,740,943 00	5,301,452 72		5,301,452 72
Manchester Fire	Manchester	298,049,833 00	894,149 60		894,149 60
National	Dublin	178,527,000 00	986,830 00		986,830 00
New Zealand	Auckland	144,353,015 00	918,723 00		1,628,062 00
North British and Mercantile	London	2,694,439,705 00	6,411,274 91	82,410,360 00	6,411,274 94
North German Fire	Hamburg	272,443,156 00	907,337 73		907,337 73
Northern	London	1,002,045,930 00	3,077,914 48		3,077,914 48
Norwich Union	Norwich, England	1,268,780,920 00	3,606,094 14		3,606,094 14
Phoenix	London	1,331,511,000 00	4,438,371 70		4,438,371 70
Prussian National	Stettin	485,337,578 00	936,333 45		971,164 06
Queen*	Liverpool	169,156,969 00	1,801,820 44	11,189,798 00	34,830 61
Royal	Liverpool	1,411,026,875 00	5,191,375 00		1,801,820 44
Scania	Malmo, Sweden	64,364,004 00	241,522 63		5,191,375 00
Scottish Union and National*	Edinburgh	84,079,763 00	912,658 37		241,522 63
South British Fire and Marine	Auckland	193,651,945 00	1,114,370 00	66,696,390 00	912,658 37
					1,959,690 00

Straits Fire.	47,529,087 00	148,666 48	---	148,666 48
Sun Fire*	128,177,333 00	1,370,349 00	---	1,370,349 00
Svea	370,137,305 00	1,493,924 06	---	1,493,924 06
Transatlantic Fire.	271,789,914 00	1,482,436 95	---	1,482,436 95
Union Fire and Marine.	40,498,780 00	323,036 83	---	323,036 83
United Fire*	142,082,903 00	1,339,085 22	---	1,339,085 22
Western*	72,232,651 00	988,998 71	---	988,998 71
Toronto.	---	---	---	---
Totals	\$23,378,215,421 00	\$79,932,259 58	\$590,757,760 00	\$85,261,782 66

* United States Branch statement.

TABLE No. 29—Continued.

NAME.	Location.	RISKS IN FORCE DECEMBER 31, 1888.			
		Fire.	Premiums.	Marine.	Premiums.
Atlas	London	\$631,026,665 00	\$946,535 00		\$946,535 00
British America*	Toronto	59,007,581 00	739,673 74	\$813,519 00	764,183 88
Caledonian	Edinburgh	261,010,600 00	635,857 40		635,857 40
City of London Fire*	London	49,964,698 00	636,705 82		636,705 82
Commercial Union	London	612,556,880 00	3,234,977 00	55,444,480 00	3,997,747 00
Economic Fire	London	55,811,215 00	172,766 15		172,766 15
General Life and Fire	London	400,087,500 00	450,000 00		450,000 00
Guardian Fire and Life	London	552,317,115 00	2,091,915 00		2,091,915 00
Hamburg-Bremen	Hamburg	100,384,190 00	732,143 88		732,143 88
Hamburg Magdeburg	Hamburg	37,789,816 00	169,326 30		169,326 30
Helvetia Swiss Fire	St. Gall, Switzerland	205,514,355 00	359,295 56		359,295 56
Imperial Fire	London	642,808,990 00	1,957,980 00		1,957,980 00
Lancashire	Manchester	938,241,851 00	2,780,316 78		2,780,316 78
Lion Fire	London	178,041,781 00	923,231 00		923,231 00
Liverpool and London and Globe	Liverpool	1,825,879,400 00	8,152,650 40		8,152,650 40
London	London	517,284,330 00	2,014,298 35		2,351,318 35
London and Lancashire	Liverpool	728,201,106 00	2,833,066 75	21,889,265 00	2,833,066 75
Magdeburg Fire	Magdeburg	181,939,638 00	545,819 90		545,819 90
Manchester Fire	Manchester	219,044,200 00	969,187 00		969,187 00
National	Dublin	121,467,040 00	784,747 00	15,520,715 00	929,836 00
New Zealand	Auckland	1,938,211,790 00	4,274,183 29		4,274,183 29
North British and Mercantile	London	192,734,279 00	480,111 19		480,111 19
North German Fire	Hamburg	668,030,620 00	2,051,942 99		2,051,942 99
Northern	London	1,094,654,870 00	3,349,197 30		3,349,197 30
Norwich Union	Norwich, England	1,331,511,000 00	4,438,371 70		4,438,371 70
Phoenix	London	379,709,259 00	477,617 25	52,842 00	483,442 41
Prussian National	Stettin	200,825,539 00	2,210,647 95		2,210,647 95
Queen*	Liverpool	1,501,473,805 00	6,878,275 00		6,878,275 00
Royal	Malmo, Sweden	24,700,715 00	73,014 77		73,014 77
Scania	Edinburgh	56,126,378 00	615,171 30		615,171 30
Scottish Union and National*	Auckland	137,414,810 00	832,900 00	11,176,415 00	1,052,625 00
South British Fire and Marine	Singapore	20,375,426 00	61,280 83		61,280 83
Straits Fire	London	183,557,947 00	1,896,698 21		1,896,698 21
Sun Fire*					

Svea.....	184,957,010 00	372,537 25	-----	-----	372,537 25
Transatlantic Fire.....	107,786,392 00	406,032 64	-----	-----	406,032 64
Union Fire and Marine.....	26,246,783 00	215,312 58	-----	87,080 37	302,392 95
United Fire*	98,837,438 00	1,152,137 44	-----	-----	1,152,137 44
Western*	68,087,176 00	911,627 00	-----	85,966 06	997,593 06
Totals.....	\$16,533,600,248 00	\$61,787,581 72	\$110,560,538 00	\$1,667,955 73	\$63,455,537 45

*United States Branch statement.

TABLE No. 30.

Summary of Assets, Liabilities, Income, Expenditures, etc., of Marine Insurance Companies doing business in California on the thirty-first day of December, 1888.

NAME.	Location.	Cash Capital Paid Up.	Assets.	Liabilities, Capital not Included.	Income.
Alliance Marine	London	\$1,000,000 00	\$2,261,508 21	\$258,562 22	\$892,710 00
Australian General	Sydney	210,000 00	713,305 00	713,305 00	261,545 00
Batavia	Basle, Switzerland	200,000 00	703,144 97	198,414 40	439,772 70
Boston Marine	Boston	1,000,000 00	2,429,038 55	583,333 07	1,103,913 69
British and Foreign Marine	Liverpool	908,000 00	4,718,173 35	628,512 52	1,842,264 39
Canton	Hong Kong	500,000 00	1,471,707 12	170,903 73	952,661 27
China Traders	Hong Kong	600,000 00	1,701,286 92	291,610 18	768,406 42
Ronciere	Paris	1,250,000 00	2,709,531 11	506,036 22	1,246,982 64
Franco-Hungarian	Buda Pesth	2,000,000 00	4,682,539 86	2,949,730 83	2,631,843 40
Globe Marine	London	500,000 00	756,388 33	201,287 29	651,647 35
Helvetia General	St. Gall, Switzerland	400,000 00	1,340,465 39	436,449 41	583,352 62
Indemnity Mutual Marine.	London	1,005,000 00	3,881,362 27	121,058 10	597,938 80
International Marine	Liverpool	500,000 00	958,921 46	208,907 37	358,078 61
London and Provincial Marine	London	500,000 00	1,315,484 26	218,507 17	592,330 42
Magdeburg General	Magdeburg	750,000 00	3,567,709 23	2,521,818 72	867,540 03
Mannheim	Mannheim	500,000 00	1,429,342 80	484,740 77	962,806 66
Man On	Hong Kong	500,000 00	671,178 50	75,850 00	240,625 80
Marine	London	900,000 00	5,311,346 00	149,500 00	1,247,690 00
Maritime	Liverpool	500,000 00	1,494,838 14	233,778 05	537,764 15
National Marine	London	500,000 00	895,828 00	371,480 00	980,608 00
North China	Shanghai	1,200,000 00	2,412,770 62	458,844 05	1,534,234 57
On Tai	Hong Kong	416,666 66	730,331 92	5,325 66	272,031 22
Reliance Marine	Liverpool	400,000 00	899,302 49	147,719 42	396,013 92
Sea	Liverpool	500,000 00	2,334,716 26	664,594 35	1,023,232 90
Standard Marine	Liverpool	500,000 00	1,400,774 21	370,705 00	540,459 11
Straits	Singapore	600,000 00	895,074 33	80,384 16	463,363 69
Switzerland Marine	Zurich	200,000 00	712,111 37	294,646 77	385,598 64
Thames and Mersey	Liverpool	1,000,000 00	6,124,057 60	1,204,011 03	1,804,012 63
Transatlantic Marine	Berlin	226,800 00	634,403 98	218,047 81	520,770 02
Union	Hong Kong	230,000 00	1,314,337 70	430,822 42	1,336,319 10
Union Marine	Liverpool	711,200 00	2,421,906 50	673,679 00	1,078,138 56
Universal Marine	London	500,000 00	2,213,263 47	452,017 19	842,611 51
Yangtze	Shanghai	880,000 00	1,126,492 56	104,878 50	351,502 83
Totals		\$21,647,666 66	\$65,763,082 48	\$15,947,513 96	\$28,148,880 45

TABLE No. 30—Continued.

NAME.	Location.	Expenditures.	Losses Incurred during the Year.	Net Surplus.
Alliance Marine	London	\$650,870 00	\$472,165 00	\$1,002,945 99
Australian General	Sydney	267,672 00	200,770 00	351,952 00
Batise	Basle, Switzerland	387,337 44	249,230 29	304,730 57
Boston Marine	Boston	935,170 12	818,904 62	845,725 48
British and Foreign Marine	Liverpool	1,692,382 31	1,221,600 83	3,121,600 83
Canton	Hong Kong	645,974 19	325,326 38	800,860 39
China Traders	Hong Kong	724,041 43	560,002 32	809,676 74
Fonciere	Paris	1,151,009 73	822,187 97	493,494 89
Franco-Hungarian	Buda-Pesth	3,123,549 02	2,348,963 27	55,401 04
Globe Marine	London	522,710 27	432,681 43	524,015 98
Helvetia General	St. Gall, Switzerland	433,118 03	323,846 50	2,755,304 17
Indemnity Mutual Marine	London	707,214 23	456,274 80	190,014 03
International Marine	Liverpool	324,174 99	507,961 20	586,977 09
London and Provincial Marine	London	581,874 87	448,655 27	235,880 51
Magdeburg General	Magdeburg	553,825 98	100,643 30	414,602 03
Mannheim	Mannheim	968,796 99	732,806 73	95,328 50
Man On	Hong Kong	222,440 80	94,183 50	4,261,846 00
Marine	London	874,844 00	358,459 00	701,000 09
Maritime	Liverpool	532,248 35	425,490 00	24,348 00
National Marine	London	813,590 00	919,265 00	753,925 97
North China	Shanghai	1,132,055 16	670,614 44	308,390 00
On Tai	Hong Kong	253,839 26	100,043 06	351,583 07
Reliance Marine	Liverpool	346,179 75	250,725 00	1,170,121 91
Sea	Liverpool	782,325 61	799,685 45	530,069 21
Standard Marine	Liverpool	481,035 12	398,240 00	214,690 17
Straits	Singapore	352,995 38	217,766 67	230,037 64
Switzerland Marine	Zurich	315,144 15	230,037 64	217,494 60
Thames and Mersey	Liverpool	1,890,117 34	1,352,695 00	3,920,045 97
Transatlantic Marine	Berlin	292,971 54	219,367 04	189,556 14
Union	Hong Kong	626,365 30	756,101 81	613,515 28
Union Marine	Liverpool	1,055,339 46	1,102,491 56	1,037,026 90
Universal Marine	London	801,340 06	617,820 31	1,291,245 56
Yangtze	Shanghai	322,497 45	183,445 36	141,614 06
Totals		\$24,735,052 93	\$18,754,410 75	\$28,445,092 83

TABLE No. 31.

Showing the various items composing the Assets of Marine Insurance Companies doing business in California on the thirty-first day of December, 1888.

NAME.	Location.	Real Estate.	Mortgage Loans.	Stocks and Bonds Owned by the Company.	Collateral Loans.	Cash in Office and Banks.
Alliance Marine.....	London.....	\$100,000 00	-----	\$2,035,164 81	-----	\$60,025 62
Australian General.....	Sydney.....	60,000 00	\$51,500 00	33,000 00	-----	490,000 00
Batise.....	Basle, Switzerland.....	22,000 00	91,000 00	354,069 70	-----	60,251 86
Boston Marine.....	Boston.....	28,740 78	532,000 00	830,518 63	-----	308,063 05
British and Foreign Marine.....	Liverpool.....	252,404 76	-----	3,503,321 35	\$73,500 00	64,672 07
Canton.....	Hong Kong.....	-----	168,450 00	385,488 89	450,638 28	78,202 00
China Traders.....	Hong Kong.....	-----	443,000 00	406,611 00	585,000 00	661,170 66
Fonciere.....	Paris.....	294,973 36	-----	628,032 09	-----	525,183 60
Franco-Hungarian.....	Buda-Pesth.....	803,747 64	2,288 40	1,826,457 75	-----	240,300 85
Globe Marine.....	London.....	-----	-----	232,249 00	15,000 00	370,916 69
Helvetia General.....	St. Gall, Switzerland.....	71,200 00	512,795 21	257,790 05	-----	321,379 01
Indemnity Mutual Marine.....	London.....	-----	175,000 00	3,591,215 00	-----	86,271 86
International Marine.....	Liverpool.....	-----	2,500 00	684,991 15	165,000 00	12,577 18
London and Provincial Marine.....	London.....	-----	-----	747,640 60	-----	379,707 81
Magdeburg General.....	Magdeburg.....	198,054 12	2,520,255 63	401,146 25	2,875 00	41,863 00
Mannheim.....	Mannheim.....	45,346 75	516,625 00	-----	-----	165,350 96
Man On.....	Hong Kong.....	36,500 00	183,000 00	298,031 96	-----	308,010 00
Marine.....	London.....	350,000 00	-----	-----	-----	45,047 96
Maritime.....	Liverpool.....	-----	-----	4,570,528 63	-----	64,638 95
National Marine.....	London.....	-----	-----	1,353,232 14	-----	377,629 00
North China.....	Shanghai.....	-----	-----	336,265 00	-----	1,221,213 79
On Tai.....	Hong Kong.....	244,254 40	-----	763,910 27	-----	262,741 96
Reliance Marine.....	Liverpool.....	72,488 00	362,250 00	-----	-----	15,503 97
Sea.....	Liverpool.....	-----	-----	627,982 50	177,250 00	15,503 97
Standard Marine.....	Liverpool.....	-----	-----	1,588,718 41	425,544 06	117,402 95
Straths.....	Singapore.....	-----	450,500 00	1,164,314 00	35,250 00	18,501 25
Switzerland Marine.....	Zurich.....	-----	37,000 00	5,187 24	-----	383,864 25
Thames and Mersey.....	Liverpool.....	-----	-----	336,434 70	-----	130,105 47
Transatlantic Marine.....	Berlin.....	-----	201,750 00	4,921,028 64	135,000 00	291,604 00
Union.....	Hong Kong.....	-----	131,811 85	248,658 61	-----	51,338 86
Union Marine.....	Liverpool.....	-----	15,000 00	683,965 54	-----	338,834 33
Universal Marine.....	London.....	91,650 64	-----	2,047,313 70	82,750 00	47,056 07
Yangtze.....	Shanghai.....	-----	139,700 00	1,786,946 50	-----	171,939 02
Totals.....	-----	\$2,671,580 45	\$6,538,926 09	\$37,138,502 64	\$2,147,867 34	\$8,228,173 29

TABLE No. 31—Continued.

NAME.	Location.	Interest Due and Accrued.	Premiums in course of Collection.	Bills Receivable, not Matured, taken for Marine Risks.	All Other Assets.	Total Assets.
Alliance Marine.....	London.....	\$10,593 75	\$37,691 56	\$13,532 47	\$4,500 00	\$2,261,508 21
Australian General.....	Sydney.....	6,815 00	70,275 00	205 00	1,510 00	713,305 00
Balaise.....	Basle, Switzerland.....	2,421 17	173,402 24			703,144 97
Boston Marine.....	Boston.....	5,183 21	156,542 13	494,450 75		2,429,058 55
British and Foreign Marine.....	Liverpool.....	7,260 58	253,547 68	150,254 23	35,874 40	4,718,173 35
Canton.....	Hong Kong.....	20,950 57	187,113 92	45,561 74		1,471,767 12
China Traders.....	Hong Kong.....	14,967 48	80,037 78			1,701,286 92
Fonciere.....	Paris.....		528,161 53		35,500 00	2,249,331 11
Franco-Hungarian.....	Buda-Pesth.....		715,433 47		293,180 53	4,652,539 86
Globe Marine.....	London.....	5,259 77	128,236 75	134,948 10	929,363 65	756,088 33
Helvetia General.....	St. Gall, Switzerland.....	11,890 32	161,365 06	2,011 85	3,014 27	1,300,465 39
Indemnity Mutual Marine.....	London.....		28,875 41		23,445 74	3,881,362 27
International Marine.....	Liverpool.....	970 33	72,133 58		10,749 22	958,921 46
London and Provincial Marine.....	London.....		185,582 10		2,533 75	1,315,484 26
Magdeburg General.....	Magdeburg.....	388 46	184,848 61		119,656 46	3,567,709 23
Mannheim.....	Mannheim.....	6,969 00	347,559 41	98,621 70		1,429,342 80
Man Oh.....	Hong Kong.....	3,750 00	24,118 50	31,092 93	18,356 76	671,178 50
Marine.....	London.....	7,478 00	309,006 25		115,200 00	5,311,346 00
Maritime.....	Liverpool.....		76,317 60	17,347 50	11,937 66	1,494,838 14
National Marine.....	London.....	10,320 00	171,164 00		619 45	895,828 00
North China.....	Shanghai.....	9,061 40	167,855 56	450 00		2,412,770 62
On Tai.....	Hong Kong.....	3,485 98	29,425 98	6,475 20		730,391 92
Reliance Marine.....	Liverpool.....	6,744 39	67,432 45			899,302 49
Sea.....	Liverpool.....	6,739 16	150,937 50	1,375 37	3,013 81	2,334,716 26
Standard Marine.....	Liverpool.....		115,980 00	33,448 27	11,925 91	1,400,774 21
Straits.....	Singapore.....	9,122 50	38,182 38	3,105 00	63,623 96	895,074 33
Switzerland Marine.....	Zurich.....		107,736 23	1,687 35	6,530 61	712,111 37
Thames and Mersey.....	Liverpool.....	71,999 44	641,182 50	83,168 63	17,696 34	6,121,057 60
Transatlantic Marine.....	Berlin.....		74,502 27	53,282 27	6,990 75	634,403 98
Union.....	Hong Kong.....	49,734 95	109,991 03			1,314,337 70
Union Marine.....	Liverpool.....	20,143 06	152,089 77	39,854 61	17,699 29	2,421,906 50
Universal Marine.....	London.....		158,340 65	4,366 66		2,213,263 47
Yangtze.....	Shanghai.....		54,798 02	169 80	431 00	1,126,492 56
Totals.....		\$292,238 52	\$5,769,866 92	\$1,273,483 67	\$1,703,343 56	\$65,763,082 48

TABLE No. 32.

Showing the various items composing the Liabilities, except Capital Stock, of Marine Insurance Companies doing business in California on the thirty-first day of December, 1888.

NAME.	Location.	Losses Adjusted.	Losses Unadjusted.	Losses Rejected.	Cash Dividends.
Alliance Marine	London		\$13,555 00		\$5,952 00
Australian General	Sydney		45,000 00		
Batise	Basle, Switzerland	\$111,507 80			216 00
Boston Marine	Boston	11,004 00	159,715 00	\$17,200 00	
British and Foreign Marine	Liverpool	6,050 00	236,657 20		583 22
Canton	Hong Kong	34,380 00	15,402 00		2,505 00
China Traders	Hong Kong		158,283 00		9,162 81
Fonciere	Paris	230,893 05			6,077 47
Franco-Hungarian	Buda-Pesth		490,251 04		2,550 21
Globe Marine	London	1,182 27	19,905 00		
Helvetia General	St. Gall, Switzerland	258,837 44			240 00
Indemnity Mutual Marine	London	9,046 35			176 75
International Marine	Liverpool	46 35	113,755 00		67 50
London and Provincial Marine	London		34,840 00	8,000 00	921 33
Magdeburg General	Magdeburg		36,282 50		836 63
Mannheim	Mannheim				179 50
Man On	Hong Kong				50,000 00
Marine	London				
Maritime	Liverpool	328,428 77			872 50
National Marine	London	24,000 00	22,375 00		5 00
North China	Shanghai	94,055 00			
On Tai	Shanghai	105,000 00	48,125 00		
Reliance Marine	Hong Kong		4,295 62		
Sea	Liverpool	44,700 00			416 25
Standard Marine	Liverpool	5,365 14	338,640 00	21,995 00	50 00
Strats	Liverpool		138,480 00		
Switzerland Marine	Singapore	30,000 00			
Thames and Mersey	Zurich		107,954 40		58 00
Transatlantic Marine	Liverpool	272,580 00			2,000 50
Union	Berlin	76,125 25			67 50
Union Marine	Hong Kong		330,488 97		
Universal Marine	Liverpool	235,000 00			952 37
Yangtze	London	832 91	20,065 00		
	Shanghai	10,722 02	41,675 50		2,286 46
Totals		\$1,915,556 35	\$2,395,815 23	\$47,195 00	\$86,437 00

TABLE No. 32—Continued.

NAME.	Location.	Marine Reinsurance.	All Other Claims.	Total Liabilities, Capital not Included.	Net Surplus.
Alliance Marine	London	\$157,325 00	\$21,730 22	\$258,562 22	\$1,002,945 99
Australian General	Sydney	65,626 00	40,727 00	151,353 00	351,952 00
Baloise	Basle, Switzerland	86,690 60		198,414 40	304,730 57
Boston Marine	Boston	395,414 07		583,333 07	845,725 48
British and Foreign Marine	Liverpool	341,897 60	53,324 50	628,512 52	3,121,660 83
Canton	Hong Kong	79,754 66	38,805 07	170,906 73	800,860 39
China Traders	Hong Kong	102,256 72	21,907 65	291,610 18	809,676 74
Fonciere	Paris	226,468 36	42,597 34	506,036 22	498,494 89
Franco-Hungarian	Buda-Pesth	47,614 22	2,409,315 36	2,949,730 83	
Globe Marine	London	146,118 50	34,081 52	201,287 29	55,401 04
Helvetia General	St. Gall, Switzerland	77,770 48	99,601 49	436,449 41	524,015 98
Indemnity Mutual Marine	London	111,835 00		121,058 10	2,755,304 17
International Marine	Liverpool	136,527 84	18,510 68	268,907 37	190,014 09
London and Provincial Marine	London	160,908 95	13,836 89	218,507 17	596,977 09
Magdeburg General	Magdeburg	13,276 82	2,471,412 77	2,521,818 72	295,890 51
Mannheim	Mannheim	148,632 50	7,500 00	484,740 77	444,602 03
Man On	Hong Kong	1,850 00			95,328 50
Marine	London	76,325 00	25,000 00	149,500 00	4,261,846 00
Maritime	Liverpool	104,625 00	34,225 55	233,778 05	761,040 09
National Marine	London	323,350 00		371,480 00	24,348 00
North China	Shanghai	350,000 00	3,844 65	458,844 65	753,925 97
On Tai	Hong Kong	1,030 04			308,399 60
Reliance Marine	Liverpool	85,967 85	16,635 32	5,325 66	351,583 07
Sea	Liverpool	242,955 12	55,589 09	664,594 35	1,170,121 91
Standard Marine	Liverpool	120,260 00	111,965 00	370,705 00	530,069 21
Straits	Singapore	45,000 00	5,384 16	80,384 16	214,690 17
Switzerland Marine	Zurich	63,327 00	123,307 37	294,646 77	217,464 60
Thames and Mersey	Liverpool	619,835 00	309,336 13	1,204,011 63	3,920,045 97
Transatlantic Marine	Berlin	62,493 42	79,361 67	218,047 84	189,556 14
Union	Hong Kong	120,333 45		450,822 42	613,515 28
Union Marine	Liverpool	177,521 15	260,206 03	673,679 60	1,037,026 90
Universal Marine	London	431,120 00		452,017 91	1,261,245 56
Yangtze	Shanghai	19,682 00	30,512 52	104,878 50	141,614 06
Totals		\$5,173,792 35	\$6,328,718 03	\$15,947,513 96	\$28,445,092 83

TABLE No. 33.

Showing the various items composing the Incomes of Marine Insurance Companies doing business in California on the thirty-first day of December, 1888.

NAME.	Location.	Marine Premiums.	Interest on Bonds and Mortgages.	Interest and Dividends from Other Sources.	Received from all Other Sources.	Total Income.
Alliance Marine.....	London.....	\$622,130 00	-----	\$70,580 00	-----	\$692,710 00
Australian General.....	Sydney.....	231,365 00	-----	29,305 00	\$875 00	261,545 00
Balaise.....	Basle, Switzerland.....	417,410 28	-----	20,365 69	1,996 73	439,772 70
Boston Marine.....	Boston.....	1,024,669 29	-----	77,274 40	-----	1,103,943 69
British and Foreign Marine.....	Liverpool.....	1,540,651 44	-----	156,276 82	145,336 13	1,842,264 39
Caution.....	Hong Kong.....	880,457 00	-----	\$8,518 85	3,722 15	992,661 27
China Traders.....	Hong Kong.....	675,248 55	-----	63,024 69	292 55	738,406 42
Fonciere.....	Paris.....	1,244,682 38	-----	42,310 26	-----	1,286,992 64
Franco-Hungarian.....	Buda-Pesth.....	447,074 55	-----	187,020 71	1,997,748 14	2,631,843 40
Globe Marine.....	London.....	631,242 25	-----	17,351 35	53 75	651,647 35
Helvetia General.....	St. Gall, Switzerland.....	539,112 93	-----	43,400 35	583,352 62	583,352 62
Indemnity Mutual Marine.....	London.....	408,533 49	-----	129,395 31	839 34	537,928 80
International Marine.....	Liverpool.....	327,051 58	-----	30,884 53	142 50	358,078 61
London and Provincial Marine.....	London.....	551,530 47	-----	40,799 95	-----	592,330 42
Magdeburg General.....	Magdeburg.....	141,841 77	-----	17,964 74	603,023 80	867,540 03
Mannheim.....	Mannheim.....	939,788 36	-----	5,648 04	-----	982,896 66
Man On.....	Hong Kong.....	212,172 80	-----	15,168 00	3,925 00	240,425 80
Marine.....	London.....	1,077,400 00	-----	170,290 00	-----	1,247,690 00
Maritime.....	Liverpool.....	482,870 00	-----	47,545 30	7,348 85	537,764 15
National Marine.....	London.....	945,971 00	-----	34,637 00	-----	980,608 00
North China.....	Shanghai.....	1,455,573 74	-----	77,560 83	1,100 00	1,534,234 57
On Tai.....	Hong Kong.....	293,412 25	-----	10,880 56	11,993 41	273,031 22
Reliance Marine.....	Liverpool.....	363,229 10	-----	29,654 20	130 62	393,013 92
Sea.....	Liverpool.....	932,867 22	-----	70,271 31	94 37	1,023,232 90
Standard Marine.....	Liverpool.....	506,212 87	-----	34,246 24	-----	540,459 11
Straits.....	Singapore.....	416,565 69	-----	46,632 80	165 00	463,363 49
Switzerland Marine.....	Zurich.....	365,494 15	-----	1,480 00	-----	385,598 64
Thames and Mersey.....	Liverpool.....	1,627,234 43	-----	170,356 08	422 12	1,804,012 63
Transatlantic Marine.....	Berlin.....	503,626 45	-----	8,153 75	481 25	520,770 02
Union.....	Hong Kong.....	1,286,584 15	-----	45,629 76	-----	1,336,319 10
Union Marine.....	Liverpool.....	1,092,147 04	-----	75,903 40	108 12	1,078,158 56
Universal Marine.....	London.....	775,190 22	-----	67,421 29	-----	842,611 51
Yangtze.....	Shanghai.....	294,338 71	-----	12,166 00	1,408 87	351,502 83
Totals.....	-----	\$23,193,679 16	\$215,539 40	\$1,958,454 19	\$2,781,207 70	\$28,148,880 45

TABLE No. 34.

Showing the various items composing the Expenditures of Marine Insurance Companies doing business in California on the thirty-first day of December, 1888.

NAME.	Location.	Marine Losses.	Dividends.	Brokerage and Commissions.	Office Salaries.	Taxes.	All Other Expenditures.	Total Expenditures.
Alliance Marine	London	\$441,725 00	\$77,525 00	\$6,975 00	\$86,390 00	\$8,710 00	\$29,545 00	\$650,870 00
Australian General	Sydney	200,770 00	31,500 00	49,407 55	34,390 00	---	1,012 00	267,672 00
Baloise	Basle, Switzerland	249,230 29	60,000 00	22,986 82	28,476 80	---	222 80	387,337 44
Boston Marine	Boston	680,809 03	100,000 00	22,986 82	38,521 72	12,731 98	80,120 57	935,170 12
British and Foreign Marine	Liverpool	1,227,560 83	266,200 00	7,105 38	161,475 55	22,409 14	7,631 41	1,692,382 31
Canton	Hong Kong	342,434 82	69,850 00	32,813 92	84,197 68	---	152,677 77	645,374 19
China Traders	Hong Kong	370,301 19	126,543 19	16,785 68	84,380 91	---	724,041 43	1,151,009 73
Ponciere	Paris	822,187 97	---	200,832 46	127,989 30	5,047 18	126,983 28	---
Franco-Hungarian	Buda-Pesth	714,373 66	75,000 00	236,138 49	369,511 80	---	1,728,525 07	3,123,549 02
Globe Marine	London	432,681 43	---	3,376 33	57,997 50	702 56	27,952 45	522,710 27
Helvetia General	St. Gall, Switzerland	323,846 60	62,466 85	62,466 85	38,627 57	8,177 74	---	433,118 63
Indemnity Mutual Marine	London	456,274 80	201,000 00	106 85	46,443 75	531 60	2,857 23	707,214 23
International Marine	Liverpool	239,465 50	37,500 00	13,088 95	32,856 47	---	1,934 77	324,174 90
London and Provincial Marine	London	448,655 27	62,500 00	---	55,359 02	1,175 63	13,425 81	581,874 87
Magdeburg General	Magdeburg	105,865 76	75,000 00	---	14,056 81	1,175 63	344,754 80	553,826 98
Mannheim	Mannheim	829,395 20	2,046 88	69,239 18	67,501 23	614 50	---	968,796 99
Man On	Hong Kong	94,183 50	50,000 00	12,500 00	23,728 00	1,337 30	40,692 00	222,440 80
Marine	London	358,459 00	375,000 00	---	108,900 00	14,244 00	18,241 00	874,844 00
Maritime	Liverpool	425,670 75	50,000 00	46,539 25	46,539 25	623 15	10,415 20	532,248 35
National Marine	London	627,610 00	---	119,275 00	42,055 00	---	24,650 00	813,590 00
North China	Shanghai	670,614 44	299,374 20	19,483 82	142,382 70	---	200 00	1,132,055 16
On Tai	Hong Kong	100,043 06	45,008 62	9,216 61	36,895 02	1,261 50	61,414 45	253,839 26
Reliance Marine	Liverpool	237,972 77	40,000 00	14,292 16	40,551 70	2,558 10	346,179 75	532,248 35
Sea	Liverpool	672,560 72	50,100 00	---	53,634 77	5,552 31	478 81	782,326 61
Standard Marine	Liverpool	399,030 00	37,500 00	24,096 25	44,505 12	---	---	481,035 12
Straits	Liverpool	217,766 67	30,000 00	26,006 69	66,963 65	---	15,138 81	352,965 38
Switzerland and Marine	Zurich	230,937 64	---	---	33,120 17	5,284 67	20,094 98	315,144 15
Thames and Mersey	Liverpool	1,352,695 22	299,599 00	26,006 69	132,982 58	5,552 02	69,288 52	1,800,117 34
Transatlantic Marine	Berlin	219,367 04	---	43,304 59	29,611 79	---	688 12	292,971 54
Union	Hong Kong	425,612 84	106,680 00	2,455 51	103,024 36	---	69,272 59	626,365 30
Union Marine	Liverpool	867,491 56	6,938 15	6,938 15	74,229 75	---	---	1,055,339 46
Universal Marine	London	617,820 31	75,000 00	---	108,519 75	---	---	801,340 06
Yangtze	Shanghai	207,689 31	36,235 30	20,268 05	47,040 76	91 06	11,172 97	322,497 45
Totals	---	\$15,610,202 08	\$2,673,162 19	\$1,058,734 24	\$2,424,890 48	\$98,539 21	\$2,869,524 73	\$24,735,052 93

TABLE No. 35.

Showing the amount of Risks Written, Premiums Received, and the amount of Risks in Force on the thirty-first day of December, 1888, with Premiums thereon, of Marine Insurance Companies doing business in California.

NAME.	Location.	Marine Risks Written During the Year.	Premiums.	Marine Risks in Force December 31, 1888.	Premiums.
Alliance Marine	London	\$146,452,750 00	\$873,315 00	\$20,215,505 00	\$217,535 00
Australian General	Sydney	20,725,400 00	339,270 00	3,869,545 00	65,627 00
Baloise	Basle, Switzerland	554,395,046 00	599,466 46	47,654,980 00	86,490 00
Boston Marine	Boston	84,121,450 00	1,277,909 06	10,925,728 00	336,414 07
British and Foreign Marine	Liverpool	356,152,378 00	2,129,091 80	23,167,691 00	406,221 20
Canton	Hong Kong	165,391,707 00	1,148,023 86	11,331,476 00	81,530 80
China Traders	Hong Kong	108,500,000 00	801,371 22	11,340,000 00	99,371 22
Ponciere	Paris		1,262,035 56		226,468 36
Franco-Hungarian	Buda-Pesth			4,103,576 00	47,614 22
Globe Marine	London	110,184,575 00	1,002,143 40	21,870,270 00	146,118 50
Helvetia General	St. Gall, Switzerland	598,424,192 00	730,368 10	6,565,645 00	77,770 48
Indemnity Mutual Marine	London	60,867,560 00	598,452 85	11,100,255 00	111,837 64
International Marine	Liverpool	51,613,275 00	327,051 58	5,791,700 00	102,191 03
London and Provincial Marine	London	147,600,290 00	804,074 02	20,350,950 00	100,908 95
Magdeburg General	Magdeburg	174,034,227 00	181,198 35	2,342,433 00	13,276 83
Mannheim	Mannheim	358,120,357 00	1,280,093 05	11,546,158 00	88,621 06
Man On	Hong Kong	59,549,500 00	212,452 40	4,068,100 00	14,595 40
Marine	London	463,985,000 00	1,372,575 00	22,510,000 00	97,000 00
Maritime	Liverpool	87,917,630 00	482,865 00	9,431,045 00	149,240 00
National Marine	London	70,384,925 00	1,000,965 00	16,892,025 00	323,350 00
North China	Shanghai				
On Tai	Hong Kong			461,414 00	2,000 00
Reliance Marine	Liverpool	57,677,915 00	357,638 62	6,699,885 00	113,870 43
Sea	Liverpool	114,190,415 00	952,020 13	10,913,870 00	212,955 13
Standard Marine	Liverpool	47,631,915 00	506,212 00	7,222,615 00	120,262 00
Straits	Singapore	60,396,854 00	416,565 69	8,887,945 00	60,313 36
Switzerland Marine	Zurich		788,037 32		63,327 00
Thames and Mersey	Liverpool	202,011,890 00	1,865,365 00	45,172,745 00	1,006,960 00
Transatlantic Marine	Berlin	163,192,200 00	601,796 00	8,921,813 00	62,463 42
Union	Hong Kong	255,436,246 00	1,517,812 46	10,696,400 00	80,222 30
Union Marine	Liverpool			18,488,985 00	177,521 15
Universal Marine	London	113,713,340 00	995,326 41	14,990,805 00	404,825 00
Yangtze	Shanghai	74,330,600 00	393,491 55	1,625,750 00	19,682 00
Totals		\$4,712,662,957 00	\$24,829,042 49	\$399,363,049 00	\$5,265,875 56

TABLE No. 36—RECAPITULATION.

Summary of Assets, Liabilities, Income, Expenditures, etc., of Fire and Marine Insurance Companies doing business in California on the thirty-first day of December, 1888.

NAME.	Cash Capital Paid Up.	Assets.	Liabilities, Capital not Included.	Income.	Expenditures.	Losses Incurred during the Year.	Net Surplus.
California companies -----	\$6,050,000 00	\$10,796,993 24	\$3,373,261 70	\$5,629,035 33	\$5,152,636 91	\$2,856,788 36	\$1,373,731 54
Companies of other States -----	39,578,700 00	125,340,079 11	53,661,187 58	60,613,465 24	56,268,496 88	31,487,649 46	32,090,193 53
Companies of foreign countries -----	32,632,506 08	251,318,709 88	138,987,290 64	79,706,929 30	74,218,629 18	42,062,714 92	69,773,110 82
Marine companies -----	21,687,966 66	65,763,082 48	15,947,513 96	28,148,880 45	24,735,052 93	18,754,410 75	28,445,092 83
Totals -----	\$99,948,862 74	\$453,218,864 71	\$211,969,253 88	\$174,098,310 32	\$160,372,815 90	\$95,161,563 49	\$131,682,128 72

TABLE No. 37—RECAPITULATION.

Showing the various items composing the Assets of Fire and Marine Insurance Companies doing business in California on the thirty-first day of December, 1888.

NAME.	Real Estate.	Mortgage Loans.	Stocks and Bonds Owned.	Collateral Loans.	Cash in Office and Banks.
California companies -----	\$1,068,275 26	\$2,805,157 42	\$3,900,877 28	\$791,360 72	\$904,580 52
Companies of other States -----	10,736,675 25	21,820,102 50	72,037,807 80	4,004,594 47	8,125,512 16
Companies of foreign countries -----	21,210,138 50	51,078,109 81	122,701,597 32	14,815,010 23	11,613,395 57
Marine companies -----	2,671,580 45	6,538,026 09	37,138,502 64	2,147,867 34	8,228,173 29
Totals -----	\$35,686,669 46	\$82,241,395 82	\$235,778,785 04	\$21,758,832 76	\$28,871,661 54
NAME.	Interest Due and Accrued.	Premiums in course of Collection.	Bills Receivable, not Matured, taken for Fire, Marine, and Inland Risks.	All Other Assets.	Total Assets.
California companies -----	\$93,698 79	\$1,026,572 46	\$175,140 78	\$31,330 01	\$10,796,993 24
Companies of other States -----	686,711 01	6,573,744 05	758,417 36	596,514 51	125,340,079 11
Companies of foreign countries -----	1,767,980 29	10,192,165 13	719,969 41	17,220,363 62	251,318,709 88
Marine companies -----	292,238 52	5,769,866 92	1,273,483 67	1,708,343 56	65,763,082 48
Totals -----	\$2,840,608 61	\$23,562,348 56	\$2,927,011 22	\$19,551,551 70	\$453,218,864 71

TABLE No. 38—RECAPITULATION.

Showing the various items composing the Liabilities of Fire and Marine Insurance Companies doing business in California on the thirty-first day of December, 1888.

NAME.	Losses Adjusted.	Losses Unadjusted.	Losses Restored.	Cash Dividends Remaining Unpaid.	Fire Reinsurance.
California companies	\$96,774 77	\$238,615 51	\$40,475 21	\$2,878 16	\$2,613,931 65
Companies of other States	1,725,856 08	2,472,402 87	592,025 03	62,254 41	46,942,127 29
Companies of foreign countries	5,899,228 24	1,596,355 88	108,031 71	317,443 24	25,086,762 38
Marine companies	1,915,556 35	2,395,815 23	47,195 00	86,437 00	-----
Totals	\$9,637,415 44	\$6,703,189 49	\$787,726 95	\$469,012 81	\$74,642,821 32
NAME.	Marine Reinsurance.	All Other Claims.	Total Liabilities, Capital Stock not Included.	Net Surplus.	
California companies	\$236,798 26	\$143,788 14	\$3,373,261 70	\$1,373,731 54	
Companies of other States	586,878 44	1,279,643 46	53,661,187 58	32,090,193 53	
Companies of foreign countries	1,566,286 42	104,413,182 77	138,987,290 64	69,773,110 82	
Marine companies	5,173,792 35	6,328,718 03	15,947,513 96	28,445,092 83	
Totals	\$7,503,755 47	\$112,165,332 40	\$211,969,253 88	\$131,682,128 72	

TABLE No. 39—RECAPITULATION.

Showing the various items composing the Incomes of Fire and Marine Insurance Companies doing business in California on the thirty-first day of December, 1888.

NAME.	Fire Premiums.	Marine Premiums.	Interest on Mortgage Loans.	Interest and Dividends from Other Sources.	Rents.	From all Other Sources.	Total Income.
California companies	\$4,447,986 60	\$708,881 92	\$211,627 86	\$189,889 11	\$57,954 20	\$12,695 64	\$5,629,035 33
Companies of other States	52,589,304 01	2,543,832 40	1,252,847 31	3,629,763 34	406,146 68	191,571 50	60,613,465 24
Companies of foreign countries	66,101,317 86	3,801,099 19	-----	5,944,325 23	-----	3,800,187 02	79,706,929 30
Marine companies	-----	23,193,679 16	215,539 40	1,958,454 19	-----	2,781,207 70	28,148,880 45
Totals	\$123,138,608 47	\$30,247,492 67	\$1,680,014 57	\$11,722,431 87	\$464,100 88	\$6,845,661 86	\$174,098,310 82

TABLE No. 40—RECAPITULATION.

Showing the various items composing the Expenditures of Fire and Marine Insurance Companies doing business in California on the thirty-first day of December, 1888.

NAME.	Fire Losses.	Marine Losses.	Dividends.	Brokerage and Commissions.	Office Salaries.	Taxes.	All Other Expenditures.	Total Expenditures.
California companies	\$2,394,334 97	\$400,283 27	\$360,383 67	\$1,003,384 48	\$416,507 77	\$85,252 24	\$490,490 51	\$5,152,636 91
Companies of other States	29,663,493 14	2,299,910 08	4,488,624 88	10,113,970 53	4,132,117 59	1,248,576 87	4,356,803 79	56,206,496 88
Companies of foreign countries	39,172,447 56	2,948,227 42	6,514,457 92	10,397,080 17	8,423,649 33	673,923 46	5,328,843 32	74,218,629 18
Marine companies	-----	15,610,202 08	2,673,162 19	1,058,734 24	2,424,890 48	98,539 21	2,869,524 73	24,735,052 93
Totals	\$71,235,275 67	\$21,218,622 85	\$14,036,628 66	\$23,133,169 42	\$15,397,165 17	\$2,106,291 78	\$13,245,662 35	\$160,372,815 90

TABLE No. 41.—RECAPITULATION.

Showing amount of Risks Written, Premiums Received, and amount of Risks in Force on the thirty-first day of December, 1888, with Premiums thereon, of Fire and Marine Insurance Companies doing business in California.

NAME.	RISKS WRITTEN DURING THE YEAR.			
	Fire.	Premiums.	Marine.	Premiums.
California companies	\$389,970,015 00	\$5,957,222 32	\$71,633,691 00	\$1,178,340 90
Companies of other States	6,022,604,757 00	62,488,708 12	644,055,197 00	3,598,081 52
Companies of foreign countries	23,378,215,421 00	79,932,259 58	590,757,760 00	5,329,523 08
Marine companies			4,712,662,957 00	24,829,042 49
Totals	\$29,790,790,193 00	\$148,378,190 02	\$6,019,109,605 00	\$34,934,987 99
				\$183,313,178 01
NAME.	RISKS IN FORCE DECEMBER 31, 1888.			
	Fire.	Premiums.	Marine.	Premiums.
California companies	\$348,698,071 00	\$4,996,221 52	\$8,314,176 00	\$410,019 39
Companies of other States	7,675,902,214 00	86,429,168 01	34,043,798 00	691,038 42
Companies of foreign countries	16,535,400,248 00	61,787,581 72	110,560,598 00	1,467,955 73
Marine companies			399,663,049 00	5,265,875 56
Totals	\$24,558,200,533 00	\$153,212,971 25	\$552,581,561 00	\$8,034,889 10
				\$161,247,860 35

TABLE No. 42.

Showing the various items composing the Assets of Life Insurance Companies doing business in California on the thirty-first day of December, 1888.

NAME.	Location.	Loans on Mortgages.	Collateral Loans.	Stock and Bonds.	Cash in Office and Banks.	Real Estate.
Pacific Mutual Life.....	San Francisco.....	\$1,431,365 58	\$1,711 94	\$23,700 00	\$97,107 91	\$114,565 40
Aetna Life.....	Hartford.....	15,723,500 77	540,768 31	9,986,406 91	3,737,601 66	1,261,895 92
Brooklyn Life.....	Brooklyn.....					
Connecticut Mutual Life.....	Hartford.....	31,630,448 60	391,183 00	10,738,477 14	2,568,772 64	9,045,869 86
Equitable Life.....	New York.....	25,640,786 64	825,000 00	30,887,411 00	10,715,549 31	22,695,389 21
Germania Life.....	New York.....	7,048,426 80	250,000 00	4,406,556 59	185,943 24	1,398,316 51
Hartford Life and Annuity.....	Hartford.....	316,580 10	3,400 00	136,289 50	42,096 21	192,755 58
Home Life.....	New York.....	1,158,150 00	770,100 00	3,357,535 50	110,311 52	175,270 36
Manhattan Life.....	New York.....	3,622,072 13	4,100,562 50	2,043,199 00	194,409 38	322,358 83
Mutual Benefit Life.....	Newark.....	20,553,760 35	3,603,245 68	11,331,988 83	699,877 76	1,285,426 05
Mutual Life.....	New York.....	49,617,874 02	10,033,000 00	48,610,704 14	2,813,277 60	11,763,125 34
National Life.....	Montpelier, Vt.....	2,253,591 75	48,000 00	1,986,806 51	73,303 00	186,470 67
New England Mutual Life.....	Boston.....	2,931,060 00	1,015,812 97	12,016,883 25	692,562 91	1,757,428 64
New York Life.....	New York.....	16,963,932 50	1,676,250 00	58,222,751 94	3,695,836 94	9,308,152 08
Northwestern Mutual Life.....	Milwaukee.....	27,352,727 03		1,116,125 14	1,096,152 42	1,243,468 41
Penn Mutual Life.....	Philadelphia.....	4,044,729 74	874,100 00	6,287,872 00	467,539 96	690,491 07
Provident Savings Life.....	New York.....	127,400 00	45,000 00	261,362 50	79,989 73	
Travelers.....	Hartford.....	3,425,476 50	239,415 00	4,538,606 30	770,919 27	938,375 97
Union Central Life.....	Cincinnati.....	3,033,059 05		12,825 00	114,015 12	217,343 00
Union Mutual Life.....	Portland, Me.....	1,156,678 80	281,661 01	2,419,225 72	177,815 07	1,288,976 92
United States Life.....	New York.....	3,120,150 00	35,711 89	2,224,647 96	54,828 05	110,750 00
Washington Life.....	New York.....	7,351,555 27		844,125 00	234,473 29	308,063 72
Totals.....		\$228,574,415 64	\$24,734,922 30	\$211,459,359 93	\$28,592,532 99	\$64,384,496 54

TABLE No. 42—Continued.

NAME.	Location.	Premium Notes.	Interest Due and Accrued.	Not Uncollected Premiums.	All Other Admitted Assets.	Total Assets.
Pacific Mutual Life.....	San Francisco.....	\$77,744 32	\$63,426 64	\$144,826 48	-----	\$1,954,448 27
Atna Life.....	Hartford.....	1,747,978 09	531,606 94	213,161 22	-----	33,743,009 82
Brooklyn Life.....	Brooklyn.....	-----	-----	-----	-----	-----
Connecticut Mutual Life.....	Hartford.....	1,953,501 18	1,002,204 80	105,431 44	\$11,552 29	57,447,440 95
Equitable Life.....	New York.....	-----	767,361 47	1,660,138 40	100,643 04	93,312,329 07
Germania Life.....	New York.....	187,638 08	118,972 73	337,810 89	7,534 99	13,961,199 83
Hartford Life and Annuity.....	Hartford.....	99,433 50	8,177 14	437 94	907,576 50	1,706,746 47
Home Life.....	New York.....	609,912 32	30,969 05	132,826 61	10,723 54	6,355,798 90
Manhattan Life.....	New York.....	906,383 26	115,262 57	238,021 96	779 17	11,543,048 80
Mutual Benefit Life.....	Newark.....	4,254,443 28	596,551 68	361,495 31	827,671 60	43,514,460 54
Mutual Life.....	New York.....	-----	922,440 58	1,738,297 05	-----	125,494,718 73
National Life.....	Montpelier, Vt.....	45,427 47	86,241 13	106,692 56	380,470 03	5,167,523 13
New England Mutual Life.....	Boston.....	956,944 13	196,687 06	139,024 50	17,734 99	19,724,538 45
New York Life.....	New York.....	378,874 10	442,474 81	1,984,659 46	9,130 43	92,685,062 26
Northwestern Mutual Life.....	Milwaukee.....	789,801 70	442,557 59	633,003 10	7,024 98	32,650,860 37
Penn Mutual Life.....	Philadelphia.....	572,448 99	83,380 30	330,277 95	370,626 16	13,721,469 17
Provident Savings Life.....	New York.....	-----	3,782 74	48,120 36	3,500 00	569,165 33
Travelers.....	Hartford.....	-----	72,360 46	233,373 42	164,255 00	10,382,781 92
Union Central Life.....	Cincinnati.....	590,597 50	74,154 55	255,957 29	253,016 33	4,520,997 84
Union Mutual Life.....	Portland, Me.....	496,249 84	67,175 51	108,533 98	5,876 91	6,002,193 76
United States Life.....	New York.....	154,036 02	66,506 68	166,739 34	-----	5,933,369 94
Washington Life.....	New York.....	226,225 61	90,852 36	256,040 78	-----	9,401,336 03
Totals.....	-----	\$14,017,639 39	\$5,783,146 79	\$9,194,870 04	\$3,078,115 96	\$589,792,499 58

TABLE NO. 43.

Showing the various items composing the Liabilities, Capital Stock not Included, of Life Insurance Companies doing business in California on the thirty-first day of December, 1888.

NAME.	Location.	Losses Adjusted and in process of Adjustment.	Losses Resisted.	Net Value of Outstanding Policies (American Table), Interest $\frac{3}{4}$ per ct.	Unpaid Dividends Due Policy Holders.	All Other Liabilities.	Total Liabilities.	Surplus as regards Policy Holders.
Pacific Mutual Life.	San Francisco.	\$4,187 00	\$5,000 00	\$1,682,971 00	\$150,764 88		\$1,692,158 00	\$262,290 27
Aetna Life.	Hartford.	225,529 00	26,500 00	26,068,328 00		\$6,221 95	26,477,343 83	7,263,065 99
Brooklyn Life.	Brooklyn.							
Connecticut Mutual Life.	Hartford.	331,952 25	35,000 00	47,962,290 00	214,370 33	326,694 03	48,870,305 61	8,577,134 34
Equitable Life.	New York.	384,190 81		68,154,052 00	97,431 00	161,432 00	68,797,105 81	21,515,223 26
Germania Life.	New York.	88,979 43	5,000 00	11,895,505 31	52,945 80	48,317 64	12,090,748 18	1,900,451 65
Hartford Life and Annuity.	Hartford.	202,700 00	58,000 00	394,882 00		683,156 79	1,338,738 79	368,007 68
Home Life.	New York.	24,182 00		4,653,395 00	19,406 17	5,840 05	4,702,823 22	1,052,975 68
Manhattan Life.	New York.	169,029 30		9,411,474 00	65,032 64	18,500 00	9,664,035 94	1,879,012 86
Mutual Benefit Life.	Newark.	211,613 07	17,000 00	37,339,092 00	213,359 27	3,900 90	37,784,965 33	5,729,495 21
Mutual Life.	New York.	291,883 58	142,699 00	109,940,005 00		175,124 35	110,519,712 93	14,975,005 80
National Life.	Montpelier, Vt.	9,000 00		3,783,467 00	31,323 61	264,686 15	4,088,476 76	1,079,046 37
New England Mutual Life.	Boston.	113,537 00		15,944,509 00	120,294 15		16,178,340 15	3,546,198 30
New York Life.	New York.	912,532 27	2,500 00	73,485,138 00		73,369 90	74,483,540 17	18,201,522 09
Northwestern Mutual Life.	Milwaukee.	186,649 62	24,000 00	25,586,366 00	75,000 00	110,183 00	25,982,198 62	6,068,061 75
Penn Mutual Life.	Philadelphia.	69,500 00		10,845,854 00	45,536 42	315,407 38	11,276,357 80	2,445,111 37
Provident Savings Life.	New York.	20,000 00	15,000 00	161,043 00			196,043 00	373,122 33
Travelers.	Hartford.	85,329 00	70,500 00	6,849,276 00		751,416 51	7,756,521 51	2,626,290 41
Union Central Life.	Cincinnati.	33,925 00		3,674,164 00	1,170 96	109,318 52	3,878,578 48	642,419 36
Union Mutual Life.	Portland, Me.	64,081 96	2,500 00	5,325,106 00		8,897 40	5,401,185 36	601,008 40
United States Life.	New York.	15,450 00	6,000 00	4,929,570 00		9,125 14	4,990,145 14	973,224 80
Washington Life.	New York.	15,872 86		8,403,045 00		10,623 85	8,429,541 71	971,794 32
Totals.		\$3,430,784 15	\$409,699 00	\$476,469,533 31	\$1,086,635 23	\$3,142,215 65	\$484,538,867 34	\$105,253,032 24

TABLE NO. 44.

Showing the various items composing the Incomes of Life Insurance Companies doing business in California on the thirty-first day of December, 1888.

NAME.	Location.	Premiums.	Interest.	Rents.	All Other Sources.	Total Income.
Pacific Mutual Life	San Francisco	\$581,828 02	\$115,917 13	\$1,708 80	-----	\$699,453 95
Etna Life	Hartford	3,404,264 73	1,721,312 86	8,151 74	-----	5,133,729 33
Brooklyn Life	Brooklyn	4,436,285 32	2,609,080 04	378,110 00	-----	7,423,475 96
Connecticut Mutual Life	Hartford	22,047,813 35	4,181,779 81	729,384 43	-----	26,958,977 59
Equitable Life	New York	1,965,804 76	537,702 36	49,796 88	-----	2,554,461 33
Germania Life	New York	984,254 63	40,144 43	6,431 20	\$1,157 33	1,047,081 47
Hartford Life and Annuity	Hartford	816,847 03	274,295 62	8,043 48	51 31	1,099,186 13
Home Life	New York	1,454,829 77	509,138 63	9,995 88	-----	1,973,964 28
Manhattan Life	New York	5,083,388 88	2,200,442 84	27,420 46	-----	7,371,252 18
Mutual Benefit Life	Newark	19,444,307 75	5,679,938 65	384,580 40	710,105 72	26,215,932 52
Mutual Life	New York	1,281,173 37	252,606 39	7,701 27	56 35	1,541,537 38
National Life	Montpelier, Vt.	2,472,809 95	882,435 18	86,242 42	45,428 24	3,486,915 79
New England Mutual Life	Boston	20,560,609 53	4,144,059 41	92,772 25	73,732 77	24,871,173 96
New York Life	New York	6,229,424 10	1,691,628 44	79,580 91	-----	8,000,633 45
Northwestern Mutual Life	Milwaukee	2,636,291 09	684,136 87	30,786 57	22,540 90	3,353,755 43
Penn Mutual Life	Philadelphia	1,145,152 65	16,896 72	1,575 84	-----	1,163,625 21
Provident Savings Life	New York	3,401,466 35	528,155 78	33,302 86	24,475 00	3,987,339 99
Travelers	Hartford	1,473,931 19	233,137 68	10,932 89	-----	1,718,001 76
Union Central Life	Cincinnati	731,888 19	224,311 10	18,357 53	8,962 95	963,519 77
Union Mutual Life	Portland, Me.	819,541 72	265,033 22	2,622 95	-----	1,087,197 89
United States Life	New York	1,831,526 93	429,761 02	16,307 72	5,409 12	2,283,004 79
Washington Life	New York	-----	-----	-----	-----	-----
Totals	-----	\$102,793,439 21	\$27,264,914 18	\$1,984,007 08	\$891,919 69	\$132,934,280 16

TABLE No. 45.

Showing the various items composing the Expenditures of Life Insurance Companies doing business in California on the thirty-first day of December, 1888.

NAME.	Location.	Losses and Matured Endowments.	Surrendered Policies.	Premium Notes Voided by Lapse of Policies.	Dividends to Policy Holders.	Dividends to Stockholders.
Pacific Mutual Life	San Francisco	\$220,167 71	\$49,532 85	---	\$32,508 97	\$10,000 00
Atna Life	Hartford	2,287,998 30	271,731 50	\$29,836 20	591,553 29	125,600 00
Brooklyn Life	Brooklyn	---	---	---	1,160,367 77	---
Connecticut Mutual Life	Hartford	3,635,752 04	529,228 52	---	2,376,663 38	7,000 00
Equitable Life	New York	7,562,489 34	1,773,332 37	---	250,837 30	24,000 00
Germania Life	New York	368,244 60	128,678 17	---	40,510 65	20,000 00
Hartford Life and Annuity	Hartford	667,459 00	60,502 53	---	118,225 18	15,000 00
Home Life	New York	405,044 00	89,139 84	---	218,187 87	32,000 00
Manhattan Life	New York	977,565 00	203,196 31	4,350 70	1,285,897 42	---
Mutual Benefit Life	Newark	3,016,816 09	624,077 39	4,877 25	2,151,839 73	---
Mutual Life	New York	9,426,756 37	3,039,251 68	---	155,006 92	---
National Life	Montpelier, Vt.	323,919 03	140,391 11	179 60	594,979 06	---
New England Mutual Life	Boston	1,403,857 00	274,715 74	30,275 78	2,300,487 80	---
New York Life	New York	5,425,926 78	2,160,719 13	19,549 93	956,761 17	---
Northwestern Mutual Life	Milwaukee	1,581,840 84	250,541 63	10,553 29	519,532 54	---
Penn Mutual Life	Philadelphia	898,561 00	181,816 03	20,186 37	376,680 61	---
Provident Savings Life	New York	401,232 51	4,628 79	---	---	96,000 00
Travelers	Hartford	1,561,240 66	78,407 53	---	---	10,000 00
Union Central Life	Cincinnati	208,090 41	88,109 49	133,685 14	27,214 74	---
Union Mutual Life	Portland, Me.	591,601 48	35,339 53	12,421 65	50,835 63	---
United States Life	New York	486,171 46	41,116 52	---	---	30,800 00
Washington Life	New York	793,113 73	254,710 78	---	165,758 00	8,571 50
Totals	---	\$42,833,847 35	\$10,339,167 44	\$265,595 91	\$13,382,898 03	\$378,371 50

TABLE No. 45—Continued.

NAME.	Location.	Commissions.	Salaries.	Medical Exam- iners.	All Other Pay- ments.	Total Expen- ditures.
Pacific Mutual Life	San Francisco.....	\$88,425 05	\$32,218 27	\$5,277 70	\$51,620 61	\$489,752 16
Atna Life	Hartford	401,884 69	72,701 33	26,058 00	237,289 15	4,044,952 46
Brooklyn Life	Brooklyn	267,318 19	112,854 72	15,809 01	917,814 39	6,699,144 64
Connelicut Mutual Life	Hartford	2,294,587 70	397,895 11	217,027 55	2,200,910 68	16,829,906 13
Equitable Life	New York	251,719 93	69,621 00	18,369 12	131,833 84	1,833,303 96
Germania Life	New York	115,097 93	39,810 33	13,600 25	51,942 73	1,008,953 42
Hartford Life and Annuity	Hartford	116,216 89	36,415 80	8,554 50	64,500 15	853,156 36
Home Life	New York	284,781 48	70,478 97	16,938 71	125,191 86	1,932,670 90
Mandattan Life	New York	529,759 79	121,537 64	42,020 59	258,520 78	5,883,506 95
Mutual Benefit Life	Newark	3,170,578 96	343,604 33	195,857 18	1,311,769 28	19,699,657 53
Mutual Life	New York	205,881 24	23,644 33	19,268 53	73,759 99	942,050 75
National Life	Montpelier, Vt.	179,370 47	101,428 87	14,097 27	222,384 56	2,821,108 75
New England Mutual Life	Boston	2,151,520 27	340,832 40	206,340 42	2,272,233 74	15,389,610 47
New York Life	New York	903,889 00	136,048 73	72,742 61	306,712 52	4,279,089 79
Northwestern Mutual Life	Milwaukee	280,360 66	69,127 77	31,917 00	227,886 85	2,229,388 22
Penn Mutual Life	Philadelphia	107,888 13	32,266 48	7,514 94	81,709 68	1,011,921 14
Provident Savings Life	New York	696,535 04	156,775 91	20,069 77	550,791 44	3,159,820 35
Travelers	Hartford	208,137 60	45,653 10	27,827 50	259,470 91	1,008,188 89
Union Central Life	Cincinnati	61,951 10	46,466 52	13,589 00	179,714 13	991,039 04
Union Mutual Life	Portland, Me.	120,239 00	43,060 87	16,436 26	106,043 56	903,887 67
United States Life	New York	161,170 47	64,770 01	21,909 60	276,348 71	1,740,412 80
Washington Life	New York					
Totals		\$13,100,314 59	\$2,357,212 49	\$1,011,285 51	\$10,028,529 56	\$93,757,222 38

TABLE No. 46.

Showing the Number and Amount of Policies, including additions, in force at the end of the previous year, and an exhibit of the Policies Issued, and of those which have ceased to be in force during the year, and those in force at the end of the year, of Life Insurance Companies doing business in California on the thirty-first day of December, 1888.

NAME.	Location.	POLICIES IN FORCE DECEMBER 31, 1887.		POLICIES ISSUED AND REVIVED DURING THE YEAR.		TOTAL.	
		Number.	Amount Insured.	Number.	Amount Insured.	Number.	Amount Insured.
Pacific Mutual Life	San Francisco	3,313	\$8,429,794 00	732	\$2,234,850 00	4,045	\$10,664,644 00
Alma Life	Hartford	65,485	97,372,334 00	8,130	16,233,553 00	73,615	113,605,887 00
Brooklyn Life	Brooklyn						
Connecticut Mutual Life	Hartford	63,483	150,992,498 00	3,461	9,068,990 00	66,944	160,061,488 00
Equitable Life	New York	129,454	483,029,562 00	39,221	153,933,535 00	168,675	636,963,097 00
Germania Life	New York	25,922	43,617,142 00	4,588	9,480,333 00	30,510	53,097,475 00
Hartford Life and Annuity	Hartford	945	1,191,099 00	2	7,225 00	947	1,198,324 00
Home Life	New York	11,073	21,756,336 00	2,129	4,942,969 00	13,202	26,699,305 00
Manhattan Life	New York	14,027	39,018,611 00	3,687	11,079,487 00	17,714	50,098,098 00
Mutual Benefit Life	Newark	55,362	147,189,403 00	7,388	18,911,241 00	62,750	166,100,644 00
Mutual Life	New York	140,830	427,583,359 00	32,597	103,346,034 00	173,427	530,929,393 00
National Life	Montpelier, Vt.	14,348	24,922,324 00	5,018	11,976,388 00	19,366	36,898,712 00
New England Mutual Life	Boston	23,817	69,754,124 00	3,276	9,291,981 00	27,093	79,046,105 00
New York Life	New York	113,323	358,935,536 00	33,334	125,019,731 00	146,657	483,955,267 00
Northwestern Mutual Life	Milwaukee	64,405	147,615,323 00	15,480	43,577,360 00	79,886	191,192,683 00
Penn Mutual Life	Philadelphia	24,909	61,018,805 00	5,685	11,780,990 00	30,594	75,804,895 00
Provident Savings Life	New York	11,564	46,871,686 00	3,287	12,002,200 00	14,851	58,873,886 00
Travelers	Hartford	19,840	37,739,893 00	3,177	7,657,158 00	23,017	45,397,051 00
Union Central Life	Cincinnati	16,626	27,724,533 00	8,006	15,052,249 00	24,632	42,776,782 00
Union Mutual Life	Portland, Me.	14,478	25,794,195 00	2,754	5,552,407 00	17,232	31,346,602 00
United States Life	New York	11,735	23,171,829 00	2,653	6,575,176 00	14,388	30,047,005 00
Washington Life	New York	17,761	39,500,327 00	4,321	9,551,611 00	22,082	49,058,138 00
Totals		812,701	\$2,283,535,173 00	188,986	\$590,280,598 00	1,001,687	\$2,873,815,771 00

TABLE No. 46—Continued.

NAME.	Location.	POLICIES TERMINATED.		NEW POLICIES IN FORCE DECEMBER 31, 1888.	
		Number.	Amount Insured.	Number.	Amount Insured.
Pacific Mutual Life	San Francisco	388	\$891,756 00	3,657	\$9,672,888 00
Alma Life	Hartford	5,866	10,701,584 00	67,749	102,901,303 00
Brooklyn Life	Brooklyn	3,284	8,639,575 00	63,630	151,351,913 00
Connecticut Mutual Life	Hartford	20,270	87,746,971 00	118,105	519,216,125 00
Equitable Life	New York	2,269	4,242,795 00	28,241	48,854,980 00
Germania Life	New York	183	227,414 00	764	970,910 00
Hartford Life and Annuity	Hartford	1,689	3,951,295 00	11,543	22,718,239 00
Home Life	New York	2,147	6,335,684 00	15,967	43,604,414 00
Manhattan Life	New York	4,796	12,692,021 00	57,954	153,498,623 00
Mutual Benefit Life	Newark	15,227	48,878,814 00	158,190	482,650,579 00
Mutual Life	New York	2,516	4,566,469 00	16,830	32,512,303 00
National Life	Montpelier, Vt.	1,788	5,454,894 00	25,305	75,691,241 00
New England Mutual Life.	Boston	16,746	61,068,762 00	129,911	419,836,505 00
New York Life	New York	6,756	18,673,792 00	73,130	172,518,891 00
Northwestern Mutual Life	Milwaukee	2,880	7,452,013 00	27,714	68,372,882 00
Penn Mutual Life	Philadelphia	1,968	7,861,000 00	12,853	51,012,286 00
Provident Savings Life	New York	1,900	4,258,630 00	21,117	41,138,361 00
Travelers	Hartford	4,582	8,905,830 00	20,110	33,870,922 00
Union Central Life	Cincinnati	2,604	4,951,092 00	11,728	26,395,600 00
Union Mutual Life	Portland, Me.	1,822	4,294,738 00	12,466	25,792,267 00
United States Life	New York	2,809	6,390,101 00	19,273	42,768,034 00
Washington Life	New York				
Totals		102,430	\$821,413,744 00	929,257	\$2,552,102,027 00

TABLE No. 47.

Showing the Number and Amount of Policies which have ceased to be in force during the year, with their mode of termination, of Life Insurance Companies doing business in California on the thirty-first day of December, 1888.

NAME.	Location.	BY DEATH.		BY EXPIRATION.		BY SURRENDER.	
		Number.	Amount Insured.	Number.	Amount Insured.	Number.	Amount Insured.
Pacific Mutual Life.....	San Francisco	48	\$112,273 00	18	\$45,600 00	58	\$170,703 00
Ætna Life.....	Hartford	955	1,604,814 00	1,115	1,206,087 00	862	1,495,118 00
Brooklyn Life.....	Brooklyn						
Connecticut Mutual Life.....	Hartford	1,339	3,293,369 00	311	495,664 00	606	1,849,405 00
Equitable Life.....	New York	1,576	6,708,392 00	514	1,936,270 00	2,619	12,039,566 00
Germania Life.....	New York	399	697,615 00	171	220,987 00	346	698,265 00
Hartford Life and Annuity.....	Hartford	13	17,750 00	15	24,133 00	152	177,031 00
Home Life.....	New York	168	339,480 00	33	65,564 00	648	1,511,448 00
Manhattan Life.....	New York	296	917,989 00	36	59,576 00	137	375,959 00
Mutual Benefit Life.....	Newark	920	2,843,994 00	656	1,694,819 00	1,590	4,239,926 00
Mutual Life.....	New York	2,072	7,293,326 00	880	2,268,976 00	2,387	9,632,833 00
National Life.....	Montpelier, Vt.	149	291,209 00	18	34,210 00	889	1,036,750 00
New England Mutual Life.....	Boston	396	1,241,716 00	212	391,058 00	420	1,123,690 00
New York Life.....	New York	1,290	4,722,697 00	854	1,129,369 00	1,926	11,345,771 00
Northwestern Mutual Life.....	Milwaukee	654	1,420,158 00	185	2,802,427 00	529	1,133,692 00
Penn Mutual Life.....	Philadelphia	322	857,350 00	126	289,237 00	596	1,327,762 00
Provident Savings Life.....	New York	100	394,725 00	1,606	6,338,625 00	16	21,750 00
Travelers.....	Hartford	208	438,748 00	52	69,421 00	173	299,716 00
Union Central Life.....	Cincinnati	127	196,890 00	111	167,764 00	162	344,993 00
Union Mutual Life.....	Portland, Me.	204	435,915 00	383	641,045 00	45	172,093 00
United States Life.....	New York	211	425,714 00	93	273,706 00	55	103,463 00
Washington Life.....	New York	208	598,514 00	108	144,263 00	434	1,119,030 00
Totals.....		11,655	\$34,822,578 00	7,497	\$20,348,791 00	14,650	\$50,188,964 00

TABLE No. 47—Continued.

NAME.	Location.	BY LAPSE.		BY CHANGE AND DECREASE, AND NOT TAKEN.	
		Number.	Amount Insured.	Number.	Amount Insured.
Pacific Mutual Life	San Francisco	199	\$485,200 00	65	\$177,980 00
Ætna Life	Hartford	1,514	3,573,507 00	1,420	2,822,058 00
Brooklyn Life	Brooklyn	848	2,024,400 00	180	1,066,747 00
Connecticut Mutual Life	Hartford	10,438	36,944,493 00	5,123	30,118,250 00
Equitable Life	New York	725	1,062,779 00	628	1,563,149 00
Germania Life	New York	1	1,500 00	2	7,000 00
Hartford Life and Annuity	Hartford	437	862,000 00	403	1,172,804 00
Home Life	New York	838	2,074,446 00	840	3,163,714 00
Manhattan Life	New York	994	2,219,993 00	636	1,603,283 00
Mutual Benefit Life	New York	5,647	14,896,223 00	4,251	14,787,456 00
Mutual Life	New York	634	1,216,500 00	806	2,007,740 00
National Life	Montpelier, Vt.	426	1,638,436 00	334	1,039,964 00
New England Mutual Life	Boston	7,027	22,913,483 00	5,649	23,279,292 00
New York Life	New York	3,860	8,432,000 00	1,328	4,885,515 00
Northwestern Mutual Life	Milwaukee	1,210	2,740,380 00	626	2,217,284 00
Penn Mutual Life	Philadelphia	36	13,500 00	240	1,043,000 00
Provident Savings Life	New York	948	2,094,250 00	519	1,386,555 00
Travelers	Hartford	2,458	4,236,236 00	1,724	3,970,037 00
Union Central Life	Cincinnati	889	1,634,180 00	983	2,067,768 00
Union Mutual Life	Portland, Me.	972	2,123,855 00	491	1,368,000 00
United States Life	New York	1,230	2,454,455 00	829	1,973,842 00
Washington Life	New York				
Totals		41,351	\$113,661,822 00	27,277	\$101,723,438 00

TABLE NO. 48.

Statement of Office Collections, showing amounts collected from the different Companies for the year ending December 31, 1888, for filing and certifying copies of papers, taxes, and substitution of securities.

NAME.	Amount.	NAME.	Amount.
<i>California Companies.</i>		Amount brought forward.....	\$17,667 19
Alta Fire	\$35 00	North American.....	137 60
Anglo-Nevada	20 00	Oregon Fire and Marine.....	20 00
California	21 00	Orient	20 00
Commercial	20 00	Pacific Fire.....	224 59
Fireman's Fund	20 00	Pennsylvania Fire.....	1,190 79
Home Mutual	20 00	People's Fire	20 00
Oakland Home	20 00	Phenix	1,407 37
Southern California	34 00	Phenix	20 00
State Investment	20 00	Prescott	137 60
Sun	21 00	Providence-Washington	30 00
Union	20 00	Security	31 50
Pacific Mutual Life.....	55 00	Southern	20 00
Pacific Surety.....	20 00	Springfield Fire and Marine	1,661 30
California Title Ins. and Trust Co.	20 00	St. Paul	361 12
<i>Companies of other States.</i>		Sun Mutual	120 00
Ætna	20 00	Teutonia	20 00
Agricultural	567 47	Traders	20 00
Amazon	30 00	Union	349 40
American	498 87	United States Fire.....	82 04
American Central.....	50 00	Washington Fire and Marine.....	671 25
American Fire.....	1,482 78	Westchester Fire	526 35
American Fire.....	105 67	Williamsburg City Fire.....	206 71
Boylston	178 59	Syndicate	65 00
Citizens	50 00	Germania	35 00
Citizens	403 30	Long Island	66 50
Citizens	20 00	Exchange	65 00
Clinton Fire	365 73	American	65 00
Concordia Fire.....	20 00	<i>Companies of Foreign Countries.</i>	
Connecticut Fire.....	20 00	Atlas	20 00
Continental.....	610 09	British America.....	20 00
Eliot	137 60	Caledonian	22 00
Farragut Fire.....	41 72	City of London Fire.....	20 00
Fire Association of Philadelphia.....	771 87	Commercial Union	20 00
Firemen's	372 36	Economic Fire.....	20 00
Firemen's	352 20	Fire Insurance Association.....	20 00
Franklin Fire.....	462 32	Guardian Fire and Life.....	20 00
German	20 00	Hamburg-Bremen	20 00
German-American.....	854 65	Hamburg-Magdeburg	20 00
Germania Fire.....	621 23	Helvetia Swiss Fire.....	20 00
Girard Fire and Marine.....	321 27	Imperial Fire.....	20 00
Glen's Falls.....	454 73	Lancashire	20 00
Granite State Fire.....	20 00	Lion Fire	20 00
Hanover Fire	786 61	Liverpool and London and Globe.....	20 00
Hartford Fire	20 00	London	30 00
Home	1,108 06	London and Lancashire.....	22 00
Howard	685 05	London and Provincial Fire.....	20 00
Insurance Co. of Dakota.....	20 00	Magdeburg Fire	20 00
Insurance Co. of North America.....	3,440 95	Manchester Fire.....	22 00
Insurance Co. of the State of Penn.....	305 30	National	20 00
Liberty	134 68	New Zealand	20 00
Manufacturers and Builders Fire.....	75 00	North British and Mercantile.....	20 00
Mechanics and Traders	20 00	North German Fire.....	20 00
Merchants	375 58	Northern	20 00
Merchants	149 30	Norwich Union	20 00
Michigan Fire and Marine.....	362 38	Phoenix	20 00
National Fire	253 47	Prussian National	20 00
National Fire.....	46 00	Queen	20 00
New Hampshire Fire	30 00	Royal	20 00
Niagara Fire.....	656 36	Scottish Union and National.....	32 50
Amount carried forward.....	\$17,667 19	Amount carried forward.....	\$25,889 81

TABLE No. 48—Continued.

NAME.	Amount.	NAME.	Amount.
Amount brought forward.....	\$25,889 81	Amount brought forward.....	\$27,113 31
South British Fire and Marine.....	38 50	Transatlantic Marine.....	20 00
Straits Fire.....	20 00	Union.....	120 00
Sun Fire.....	20 00	Union Marine.....	20 00
Svea.....	35 00	Universal Marine.....	20 00
Transatlantic Fire.....	20 00	Yangtze.....	120 00
Union Fire and Marine.....	20 00	Indemnity Mutual Marine.....	65 00
United Fire.....	120 00		
Western.....	30 00	<i>Life Companies.</i>	
Scania.....	65 00	Ætna Life.....	20 00
General Life and Fire.....	65 00	Brooklyn Life.....	20 00
<i>Marine Companies.</i>		Connecticut Mutual Life.....	20 00
Alliance Marine.....	20 00	Equitable Life.....	20 00
Australian General.....	120 00	Germania Life.....	20 00
Baloise.....	20 00	Hartford Life.....	20 00
Boston Marine.....	20 00	Home Life.....	30 00
British and Foreign Marine.....	20 00	Manhattan Life.....	20 00
Canton.....	20 00	Mutual Benefit Life.....	20 00
China Traders.....	20 00	Mutual Life.....	20 00
Chinese.....	20 00	National Life.....	30 00
Fonciere.....	20 00	New England Mutual Life.....	20 00
Franco-Hungarian.....	120 00	New York Life.....	20 00
Globe Marine.....	20 00	Northwestern Mutual Life.....	120 00
Helvetia General.....	20 00	Penn Mutual Life.....	30 00
International Marine.....	20 00	Travelers.....	20 00
London and Provincial Marine.....	30 00	Union Central Life.....	130 00
Magdeburg General.....	20 00	Union Mutual Life.....	495 29
Mannheim.....	30 00	United States Life.....	20 00
Man On.....	20 00	Washington Life.....	20 00
Maritime.....	20 00	Phoenix Mutual Life.....	20 00
National Marine.....	20 00	Provident Savings Life.....	65 00
North China.....	20 00		
On Tai.....	30 00	<i>Miscellaneous Companies.</i>	
Reliance Marine.....	20 00	American Steam Boiler.....	20 00
Sea.....	20 00	American Surety.....	20 00
Standard Marine.....	20 00	Employers Liability.....	120 00
Straits.....	20 00	Fidelity and Casualty.....	20 00
Switzerland Marine.....	20 00	Hartford Steam Boiler.....	20 00
Thames and Mersey.....	20 00	Lloyds Plate Glass.....	20 00
The Marine.....	20 00	Metropolitan Plate Glass.....	20 00
Amount carried forward.....	\$27,113 31	Total.....	\$28,928 60

I certify the foregoing to be a full, true, and correct statement of the receipts of the Insurance Department of the State of California for the year eighteen hundred and eighty-eight, to the best of my knowledge and belief.

J. C. L. WADSWORTH,
Insurance Commissioner.

Subscribed and sworn to before me, this thirty-first day of May, 1889.

[SEAL.]

GEO. T. KNOX, Notary Public.

CHAPTER XXVIII.

An Act to amend section four hundred and forty-seven of the Civil Code of the State of California, relating to the valuation of policies of life insurance.

[Approved February 25, 1889.]

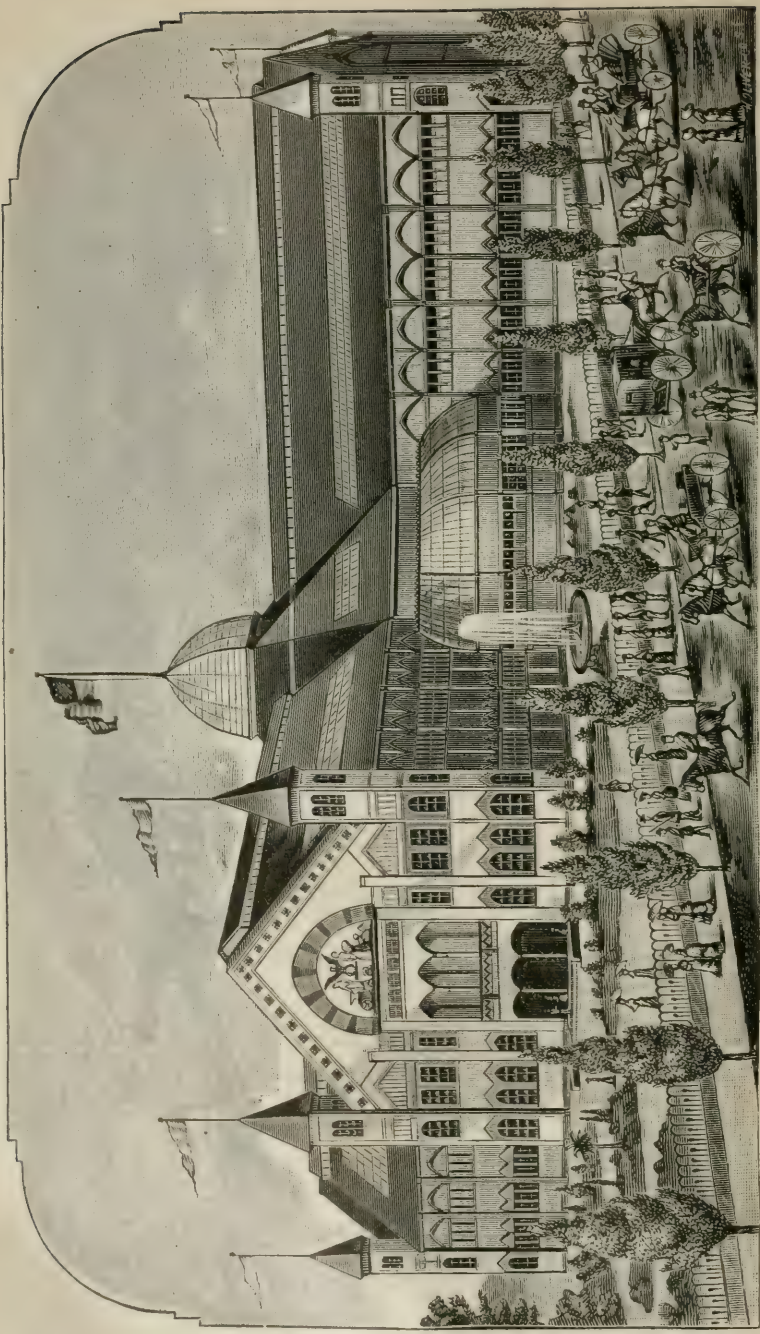
The People of the State of California, represented in Senate and Assembly, do enact as follows:

SECTION 1. Section four hundred and forty-seven of the Civil Code of the State of California is amended to read as follows:

447. Every life insurance corporation organized under the laws of this State must, on or before the first day of February of each year, furnish the Insurance Commissioner the necessary data for determining the valuation of all its policies outstanding on the thirty-first day of December, then next preceding. And every life insurance company organized under the laws of any other State or country, and doing business in this State, must, upon the written requisition of the Commissioner, furnish him, at such time as he may designate, the requisite data for determining the valuation of all its policies then outstanding; such valuations must be based upon the rate of mortality established by the American Experienced Life Table, and interest at four and one half per cent per annum; *provided*, that from and after the thirty-first day of December, A. D. one thousand eight hundred and ninety-one, such valuations must be based upon the rate of mortality established by the Combined Experience or Actuaries' Table of Mortality, with interest at the rate of four per cent per annum. When the laws of any other State or Territory require of a life insurance company organized under the laws of this State a valuation of its outstanding policies by any standard of valuation different from that named in this section, the Insurance Commissioner is hereby authorized to make such valuation for use in such other State or Territory, and to issue his certificate in accordance therewith. For the purpose of making the valuations, the Insurance Commissioner is authorized to employ a competent actuary, whose compensation for such valuations shall be three cents for each thousand dollars of insurance, to be paid by the respective companies whose policies are thus valued.

SEC. 2. All Acts and parts of Acts in conflict with the provisions of this Act are hereby repealed.

○



STATE AGRICULTURAL AND INDUSTRIAL EXPOSITION BUILDING.
Sacramento, California.

TRANSACTIONS
OF THE
CALIFORNIA
STATE AGRICULTURAL SOCIETY
DURING THE YEAR 1888.



SACRAMENTO:
STATE OFFICE, : : : J. D. YOUNG, SUPT. STATE PRINTING.
1889.

STATE BOARD OF AGRICULTURE FOR 1888.

DIRECTORS.

CHRISTOPHER GREEN.....	Sacramento.
JESSE D. CARR	Salinas, Monterey County.
J. McM. SHAFTER	San Francisco.
G. W. HANCOCK	Sacramento.
FREDERICK COX	Sacramento.
L. J. ROSE	San Gabriel, Los Angeles County.
DANA PERKINS.....	Rocklin.
E. C. SINGLETARY	San José.
L. U. SHIPPEE.....	Stockton.
JOHN BOGGS	Princeton, Colusa County.
C. M. CHASE.....	San Francisco.
H. M. LA RUE.....	Sacramento.

OFFICERS OF THE BOARD.

PRESIDENT,	
L. U. SHIPPEE.....	Stockton.
SECRETARY,	
EDWIN F. SMITH	Sacramento.
TREASURER,	
L. A. UPSON.....	Sacramento.
SUPERINTENDENT OF PARK,	
G. W. HANCOCK	Sacramento.
SUPERINTENDENT OF PAVILION,	
H. M. LA RUE.....	Sacramento.

STATE AGRICULTURAL SOCIETY.

AN ACT

TO PROVIDE FOR THE MANAGEMENT AND CONTROL OF THE STATE AGRICULTURAL SOCIETY BY THE STATE.

[Approved April 15, 1880.]

The People of the State of California, represented in Senate and Assembly, do enact as follows :

SECTION 1. The State Agricultural Society is hereby declared a State institution.

SEC. 2. Within ten days after the passage of this Act, the Governor shall appoint twelve resident citizens of the State, who shall, when organized, constitute a State Board of Agriculture, who shall, except as hereinafter provided, hold office for the term of four years, and until their successors are appointed and qualified. Vacancies occurring from any cause in the Board shall be filled by appointment of the Governor for the unexpired term of the office vacated.

SEC. 3. Within ten days after their appointment, the persons so appointed shall qualify, as required by the Constitution, and shall meet at the office of the State Agricultural Society, and organize by the election of one of their number as President of the Board and said society, who shall hold said office of President for the term of one year, and until his successor is elected and qualified. The Board shall also elect a Secretary and Treasurer, not of their number, who shall each hold office at the discretion of the Board.

SEC. 4. At the same meeting the members of the Board shall, by lot or otherwise, classify themselves into four classes of three members each. The term of office of the first class shall expire at the end of the first fiscal year; of the second class, of the second year; of the third class, of the third year; of the fourth class, at the end of the full term of four years. The fiscal year shall be from the first of February to the first of February.

SEC. 5. The State Board of Agriculture shall be charged with the exclusive management and control of the State Agricultural Society as a State institution; shall have possession and care of its property, and be intrusted with the direction of its entire business and financial affairs. They shall define the duties of the Secretary and Treasurer, fix their bonds and compensation, and shall have power to make all necessary changes in the Constitution and rules of the society, to adapt the same to the provisions of this Act, and to the management of the society, its meetings and exhibitions. They shall provide for an annual Fair or exhibition by the society of all the industries and industrial products of the State, at the City of Sacramento; *provided*, that in no event shall the State be liable for any premium awarded or debt created by said Board of Agriculture.

SEC. 6. The Board shall have power to appoint all necessary Marshals and police to keep order and preserve peace at the annual Fairs of the society; and the officers so appointed shall be vested with the same authority for the preservation of order and peace, on the grounds and in the buildings of the society, that executive peace officers are vested with by law.

SEC. 7. Said Board shall use all suitable means to collect and disseminate all kinds of information calculated to educate and benefit the industrial classes, develop the resources, and advance the material interests of the State, and shall, on or before the first day of February of each year, report to the Governor a full and detailed account of their transactions, statistics, and information gained, and also a full financial statement of all funds received and disbursed. They shall also make such suggestions and recommendations as experience and good policy may dictate to the improvement and advancement of the agricultural and kindred industries.

SEC. 8. The Superintendent of State Printing shall, each year, print and bind in cloth four thousand volumes of said transactions, and deliver the same to said Board of Agriculture for distribution and exchange. He shall also do such job printing as said Board may require to carry out the provisions of this Act.

SEC. 9. The Directors or Board of Managers of each county and district agricultural society or association, and of county, district, or State horticultural and stock breeding association or society, organized and acting under the laws of this State, shall report

annually, on or before the first day of April, to the State Board of Agriculture, the name and Post Office address of each officer of such society or association; and, on or before the first day of December, shall report to the Board of Agriculture the transactions of said society, including the premiums offered, the list of stock and articles exhibited, and the premiums paid; the amount of receipts and expenditures for the year, the new industries inaugurated, and any and all facts and statistics showing the development and extent of the industries, products, and resources of the country or district embraced within the management of such society or association; *provided*, that the provisions of this Act shall not apply to any Board of Commissioners or other body organized under the laws of this State, the object of which is to promote vinicultural industries, unless such Board or body shall voluntarily request the privilege of making such reports as are called for by this Act, in which case this Board or body shall enjoy equal privileges as are accorded to other institutions devoted to agriculture.

SEC. 10. To facilitate such reports, the State Board of Agriculture shall have prepared, and shall furnish such societies with necessary schedules and blanks for such reports, and such State Board shall include such reports from societies and associations, or so much thereof as they may deem advisable, in their report to the Governor.

SEC. 11. When said State Board of Agriculture shall have been organized and classified as provided herein, the Secretary of the Board shall report such organization and classification to the Governor. He shall also report any vacancy that may occur in said Board at any time.

SEC. 12. All laws and parts of laws in conflict with this Act are hereby repealed.

SEC. 13. This Act shall take effect and be in force from and after its passage.

CONSTITUTION

OF THE

CALIFORNIA STATE AGRICULTURAL SOCIETY.

[Revised and adopted by the State Board of Agriculture, April 20, 1886.]

NAME.

SECTION 1. This society shall be called "The California State Agricultural Society."

OBJECT.

SEC. 2. It shall be the object of this society to encourage the cultivation of the soil, and the general development of all the agricultural resources of this State.

SEC. 3. To foster every branch of mechanical and household arts calculated to increase the comforts of home life.

SEC. 4. To extend and facilitate the various branches of mining and mining interest.

MEMBERSHIP.

SEC. 5. *Annual Members.*—Any person who shall pay into the funds of this society the sum of five dollars, may become a member of the same; such membership to expire at the end of the current fiscal year.

SEC. 6. *Life Members.*—Any person may become a member for life by the payment of fifty dollars; or, if already a member, by the payment of forty-five dollars, or by serving a full term as a member of the State Board of Agriculture, and shall thereafter be exempt from all dues and assessments.

SEC. 7. *Honorary and Corresponding Members.*—Any person whom the Board shall propose may be elected an honorary or corresponding member, and shall enjoy, free of charge, all the privileges of the society, except voting and holding office.

SEC. 8. *Privileges of Members.*—Any citizen of this State, being a life member of this society, shall be furnished with a personal badge for his separate use, which shall entitle him to admission to all the exhibitions of the society, the quarter-stretch, the Grand Stand at Park, during his lifetime, and a separate ticket for the use of his wife and minor children only, which will entitle them to admission to all the exhibitions of the society, each day, as follows: a coupon for the Park (morning), a coupon for the Park (afternoon), a coupon for Pavilion afternoon and evening, and shall be permitted to compete for premiums in any and all departments.

Annual members will be furnished with a ticket that will entitle him, accompanied by a lady, and one child under fifteen years of age, or, if purchased in the name of a lady, will admit the owner and lady, and one child under fifteen years of age, twice daily at Park and Pavilion, and permission to compete for premiums in any and all departments.

SEC. 9. *Expulsion of Members.*—Any member who shall present for exhibition any article or animal which he is not entitled by the rules of the society to exhibit, or who shall attempt to deceive, or be guilty of a breach of good faith toward the society, may be expelled by a vote of two thirds of the members present at any meeting of the Board; *provided*, always, that no member shall be expelled unless written notice of the alleged offense shall have been served on him, or left at his usual place of residence at least twenty days previous to the action.

OFFICERS.

SEC. 10. The officers of this society shall consist of twelve Directors, to be appointed by the Governor, who shall constitute a State Board of Agriculture, seven of whom shall constitute a quorum. The Board shall be charged with the exclusive management and control of the State Agricultural Society as a State institution; shall have possession and care of its property, and be intrusted with the direction of its entire business and financial affairs; shall have power to make all necessary changes in the Constitution and rules of the society; shall provide for an annual Fair or exhibition by the society of all the industries and industrial products of the State, at the City of Sacramento, and such other exhibition as they may deem important. They shall elect one of their members as President of the Board and society, and a Treasurer and Secretary, not members of the Board. They may also appoint, annually, as officers of the Board, a chemist, a botanist, a mineralogist, a geologist, a metallurgist, an ornithologist, and an entomologist, and define the

duties of each. They may appoint such committees on the various departments of agriculture, mining, and manufactures, either generally or for specific purposes, as they may deem important for the best interests of the State, and require such committees to report the results of their investigations to the Board at such times as may be named by them.

SEC. 11. *Duties of President.*—The President shall preside at all meetings of the Board and of the society; shall have power to call special meetings of the Board when necessary, and at the written request of ten members may call extra meetings of the society; shall appoint all meetings not otherwise provided for; and shall sign all financial and official documents emanating from the society, and not otherwise provided for. In the absence of the President from any meeting of the Board or society, any Director may be called to the chair, and, during such meeting, and for the completion of any business transacted, or ordered at the same, shall have the same powers as the President.

SEC. 12. *Duties of Secretary.*—The Secretary shall conduct the correspondence of the Board or society, keeping copies of all important letters written in the name or on behalf of the Board or society, holding the same free to the inspection of any member of the Board or society, at any regular meeting of the same. He shall also receive and file all letters addressed to the Board or society, holding the same subject to the Board of Directors. He shall attend all meetings of the society and the Board, keeping a full record of the proceedings of each in a book for that purpose. He shall prepare and publish all notices of meetings, shall keep a roll of standing committees, and call the same (noticing absences) whenever desired to do so by the Chair; shall sign all certificates for honorary and corresponding and life memberships, and forward the same to those entitled to receive them. He shall keep, in a book prepared for that purpose, the name and address of every member; shall prepare and sign all gratuitous or complimentary cards or tickets of admission; shall countersign all diplomas, certificates of merit, etc., awarded by the Board, and forward the same to their respective claimants. He shall be ex officio Librarian; shall keep the seal and all the plates, dies, engravings, etc., belonging to the society, and shall cause to be struck therefrom such medals and impressions as may, from time to time, be required. He shall have charge of all specimens, models, plants, seeds, books, etc., and arrange, prepare, or distribute the same under the direction of the Board. He shall prepare all reports to be made by the Board to the society, and to the State. He shall receive all moneys due or payable to the society, and pay the same to the Treasurer, taking his receipt therefor; shall hold all bonds filed by officers of the society, for the faithful performance of their duty, and all vouchers for every class of expenditure. He shall countersign all drafts ordered by the Board, and all certificates of annual and life membership, and keep an account of the same in a book as they are issued, and shall, in December of each year, prepare a tabular statement of the receipts and expenditures of the Board according to the law organizing the same.

SEC. 13. *Duties of the Treasurer.*—The Treasurer shall receipt for all funds at the hands of the Secretary, and shall disburse the same only on the order of the Board, attested by the President and the Secretary. He shall also hold in trust all certificates of stock, and shall transfer, invest, or dispose of the same only by direction of the Board. He shall file with the Secretary a bond for the faithful performance of his duties, said bond to be approved by the Board, and shall, at the annual meeting, make to the society a detailed report of all his transactions.

STANDING COMMITTEES.

SEC. 14. *Committee of Finance.*—The Committee of Finance shall consist of five members of the Board, the President being one, whose duty it shall be to audit the Secretary's and Treasurer's accounts, to examine and approve all bills before they are paid, to have general supervision of the finances of the society, and to report their transactions and financial condition of the society in full to the Board whenever called on so to do.

SEC. 15. *Library Committee.*—The Library Committee shall consist of four members of the Board, and the Secretary, whose duty it shall be to have the general supervision of the library and cabinet, and make all necessary rules and regulations for the government of the same (said rules and regulations being subject to the approval of the Board), to suggest such means for the safe-keeping and enlargement of both the library and cabinet as they may deem expedient, and to make a full report of their transactions, together with the state of the department under their charge, at each annual meeting.

SEC. 16. *Visiting Committee.*—The Visiting Committee, to be appointed by the Board, from their own number, shall visit and examine all farms, orchards, vineyards, nurseries, field crops, irrigating works, agricultural machine works, agricultural machinery in operation, etc., which may be entered for competition, and which require examination at other times and places than the annual Fair; to award premiums for the same according to the schedule, and recommend such gratuities as they may deem proper, and make a full report to the Board at least one day previous to the annual Fair.

SEC. 17. *Printing and Publication Committee.*—The Committee on Printing and Publication shall consist of five (the President and Secretary being two), whose duty it shall be to contract for and superintend, under the direction of the Board, all printing and publishing necessary for the society.

OFFICE AND ROOMS.

SEC. 18. The office, rooms, library, and cabinet of the Board and society shall be permanently located at the Capital of the State.

LAWS RELATING TO DISTRICT AGRICULTURAL ASSOCIATIONS.

AN ACT

TO FORM AGRICULTURAL DISTRICTS, TO PROVIDE FOR THE ORGANIZATION OF AGRICULTURAL ASSOCIATIONS THEREIN, AND FOR THE MANAGEMENT AND CONTROL OF THE SAME BY THE STATE.

[Approved April 15, 1880.]

The People of the State of California, represented in Senate and Assembly, do enact as follows:

SECTION 1. The Counties of Alameda, Contra Costa, and San Francisco shall constitute Agricultural District No. 1.

SEC. 2. The Counties of San Joaquin, Calaveras, Fresno, Kern, Merced, Mariposa, Stanislaus, Tulare, and Tuolumne shall constitute Agricultural District No. 2.

SEC. 3. The Counties of Sutter, Yuba, Butte, Colusa, Tehama, Yolo, and Sacramento shall constitute Agricultural District No. 3.

SEC. 4. The Counties of Sonoma, Marin, Solano, Napa, and Lake shall constitute Agricultural District No. 4.

SEC. 5. The Counties of Santa Clara and San Mateo shall constitute Agricultural District No. 5.

SEC. 6. The Counties of Los Angeles, San Diego, San Bernardino, Santa Barbara, Ventura, and Inyo shall constitute Agricultural District No. 6.

SEC. 7. The Counties of Monterey, Santa Cruz, San Luis Obispo, and San Benito shall constitute Agricultural District No. 7.

SEC. 8. The Counties of Nevada, Placer, El Dorado, Amador, Alpine, and Mono shall constitute Agricultural District No. 8.

SEC. 9. The Counties of Mendocino, Humboldt, and Del Norte shall constitute Agricultural District No. 9.

SEC. 10. The Counties of Siskiyou, Trinity, and Shasta shall constitute Agricultural District No. 10.

SEC. 11. The Counties of Plumas, Lassen, Modoc, and Sierra shall constitute Agricultural District No. 11.

SEC. 12. Any fifty or more persons representing a majority of the counties within any one of the districts above constituted, may form an association for the improvement of the material industries within such district, and when so formed the association shall be known and designated by the name of — Agricultural Association, and by such name and style shall have perpetual succession, and shall have power and authority to contract and be contracted with, to sue and be sued, to have and use a common seal, to purchase and hold and lease real estate, with such buildings and improvements as may be erected thereon, and may sell and lease and dispose of the same at pleasure. The said real estate shall be used by such association for the purpose of holding exhibitions of horses, cattle, and other stock, of the agricultural, horticultural, viticultural, mechanical, manufacturing, and domestic products of such district, with view to the improvement of all the industries in the same.

SEC. 13. The officers of such association shall consist of eight Directors, who shall constitute a District Board of Agriculture for District Number —, a President, who shall be one of their number, and a Secretary and Treasurer, not of their number.

SEC. 14. Within ten days after the formation of an agricultural association within any of the districts above constituted, in accordance with the provisions of this Act, and notice of such formation to the Governor, the Governor shall appoint eight resident citizens of such district as members of a District Board of Agriculture for said district, whose term of office shall be four years, except as hereinafter provided.

SEC. 15. Within ten days after their appointment, the persons so appointed shall qualify, as required by the Constitution, and shall meet at a place within the district, and organize by the election of one of their number President of the Board and association, who shall hold said office of President one year, and until his successor is elected; they shall also elect a Secretary and Treasurer.

SEC. 16. At the same meeting the members of the Board shall, by lot or otherwise, classify themselves into four classes of two members each. The terms of office of the first class shall expire at the end of the first fiscal year; of the second class, of the second fiscal year; of the third class, of the third fiscal year; and of the fourth class, at the end

of the full term of four years. The fiscal year shall be from December first to December first.

SEC. 17. Each association so formed and organized is hereby declared and shall be recognized a State institution, and the Board so appointed and qualified shall have the exclusive control and management of such institution for and in the name of the State, and shall have the possession and care of all the property of the association, and shall fix the terms of office, and the bonds of the Secretary and Treasurer, and determine their salaries and duties. They shall have power to make all necessary by-laws, rules, and regulations for the government of the association and the management of its prudential and financial affairs. They shall provide for an annual Fair or exhibition by the association of all the industries and industrial products in the district, at such time and place as they deem advisable; *provided*, that no District Fair shall be held in any of the districts at the same time of the State Fair; *and provided further*, that the State shall in no event be liable for any premium offered, or award, or for any debt contracted by any District Board of Agriculture or Agricultural Association.

SEC. 18. When any District Board of Agriculture shall have been classified and organized as herein provided, the Secretary of the Board shall report such classification and organization to the State Board of Agriculture; he shall also report the same to the Governor, and shall report any vacancy that may occur in the Board to the Governor, who shall fill the same by appointment for the unexpired term.

SEC. 19. All laws and parts of laws in conflict with this Act are hereby repealed.

SEC. 20. This Act shall take effect from and after its passage.

AN ACT

TO AMEND SECTIONS THREE, FOUR, NINE, AND ELEVEN OF AN ACT ENTITLED "AN ACT TO FORM AGRICULTURAL DISTRICTS, TO PROVIDE FOR THE ORGANIZATION OF AGRICULTURAL ASSOCIATIONS THEREIN, AND FOR THE MANAGEMENT AND CONTROL OF THE SAME BY THE STATE," APPROVED APRIL 15, 1880, SO AS TO CREATE TWO ADDITIONAL DISTRICTS.

[Approved March 6, 1883.]

The People of the State of California, represented in Senate and Assembly, do enact as follows:

SECTION 1. Section three of the Act of which this is amendatory, entitled an Act to form agricultural districts, to provide for the organization of agricultural associations therein, and for the management and control of the same by the State, approved April fifteenth, eighteen hundred and eighty, is amended to read as follows:

Section 3. The Counties of Butte, Colusa, and Tehama shall constitute Agricultural District Number Three.

SEC. 2. Section four of said Act is amended to read as follows:

Section 4. The Counties of Sonoma, Marin, Solano, and Napa shall constitute Agricultural District Number Four.

SEC. 3. Section nine of said Act is amended to read as follows:

Section 9. The Counties of Humboldt and Del Norte shall constitute Agricultural District Number Nine.

SEC. 4. Section eleven of said Act is amended so as to read as follows:

Section 11. The Counties of Plumas, Lassen, Modoc, and Sierra shall constitute Agricultural District Number Eleven. The Counties of Mendocino and Lake shall constitute Agricultural District Number Twelve; and the Counties of Sacramento, Yolo, Yuba, and Sutter shall constitute Agricultural District Number Thirteen.

SEC. 5. This Act shall take effect immediately.

AN ACT

TO AMEND AN ACT ENTITLED "AN ACT TO FORM AGRICULTURAL DISTRICTS, TO PROVIDE FOR THE ORGANIZATION OF AGRICULTURAL ASSOCIATIONS THEREIN, AND FOR THE MANAGEMENT AND CONTROL OF THE SAME BY THE STATE," APPROVED APRIL 15, 1880.

[Approved March 9, 1885.]

The People of the State of California, represented in Senate and Assembly, do enact as follows:

SECTION 1. Section eighteen of said Act is hereby amended so as to read as follows:

Section 18. When any District Board of Agriculture shall have been classified and organized as herein provided, the Secretary of the Board shall report such classification and organization to the State Board of Agriculture. He shall also report the same to the Governor, and shall report any vacancy that may occur in the Board to the Governor, who shall fill the same by appointment for the unexpired term. The Governor shall have the power and authority to remove a Director at any time for good and sufficient cause, and to appoint a Director to fill the vacancy.

SEC. 2. This Act shall take effect immediately.

AN ACT

TO AMEND SECTION EIGHT OF AN ACT ENTITLED "AN ACT TO FORM AGRICULTURAL DISTRICTS, TO PROVIDE FOR THE ORGANIZATION OF AGRICULTURAL ASSOCIATIONS THEREIN, AND FOR THE MANAGEMENT AND CONTROL OF THE SAME BY THE STATE," APPROVED APRIL 15, 1880.

[Approved March 14, 1885.]

The People of the State of California, represented in Senate and Assembly, do enact as follows:

SECTION 1. Section eight of the Act recited in the title hereto is amended so as to read as follows:

Section 8. The Counties of Nevada and Placer shall constitute Agricultural District Number Seventeen; and the Counties of Alpine, Amador, El Dorado, and Mono shall constitute Agricultural District Number Eight. And the sum of three thousand dollars is hereby appropriated out of any money in the State Treasury not otherwise appropriated, for the aid of District Agricultural Society Number Seventeen, to be audited and paid the same as appropriations for other district agricultural societies.

SEC. 2. This Act shall take effect immediately.

AN ACT

TO AMEND SECTIONS TWO, FOUR, SIX, SEVEN, AND EIGHT OF AN ACT ENTITLED "AN ACT TO FORM AGRICULTURAL DISTRICTS, TO PROVIDE FOR THE ORGANIZATION OF AGRICULTURAL ASSOCIATIONS THEREIN, AND FOR THE MANAGEMENT AND CONTROL OF THE SAME BY THE STATE," APPROVED APRIL 15, 1880, SO AS TO CREATE CERTAIN ADDITIONAL DISTRICTS.

[Approved March 9, 1887.]

The People of the State of California, represented in Senate and Assembly, do enact as follows:

SECTION 1. Sections two, four, six, seven, and eight of an Act entitled "An Act to form agricultural districts, to provide for the organization of agricultural associations therein, and for the management and control of the same by the State," approved April fifteenth, eighteen hundred and eighty, is hereby amended so as to read as follows:

Section 2. The Counties of San Joaquin, Merced, Stanislaus, and Tuolumne shall constitute Agricultural District Number Two; the Counties of Tulare and Kern shall constitute Agricultural District Number Fifteen; the Counties of Merced, Mariposa, and Fresno shall constitute Agricultural District Number Twenty-one.

Section 4. The Counties of Sonoma and Marin shall constitute Agricultural District Number Four; and the Counties of Solano and Napa shall constitute Agricultural District Number Twenty-five; the Counties of Los Angeles, San Bernardino, and Ventura shall constitute Agricultural District Number Six, and the County of Santa Barbara shall constitute Agricultural District Number Nineteen.

Section 7. The Counties of Monterey and San Benito shall constitute Agricultural District Number Seven; the County of Santa Cruz shall constitute Agricultural District Number Fourteen; the County of San Luis Obispo shall constitute Agricultural District Number Sixteen.

Section 8. The Counties of Nevada and Placer shall constitute Agricultural District Number Seventeen; and the County of El Dorado shall constitute Agricultural District Number Eight; the Counties of Alpine, Inyo, and Mono shall constitute Agricultural District Number Eighteen; the Counties of Amador and Calaveras shall constitute Agricultural District Number Twenty-six.

SEC. 2. This Act shall take effect immediately.

SEC. 3. All Acts and parts of Acts in conflict with this Act are hereby repealed.

AN ACT

TO AMEND SECTION ONE, TO REPEAL SECTIONS TWO, THREE, FOUR, FIVE, SIX, SEVEN, EIGHT, NINE, TEN, AND ELEVEN, AND TO RENUMBER SECTIONS TWELVE, THIRTEEN, FOURTEEN, FIFTEEN, SIXTEEN, SEVENTEEN, EIGHTEEN, AND NINETEEN OF AN ACT ENTITLED "AN ACT TO FORM AGRICULTURAL DISTRICTS, TO PROVIDE FOR THE ORGANIZATION OF AGRICULTURAL ASSOCIATIONS THEREIN, AND FOR THE MANAGEMENT AND CONTROL OF THE SAME," APPROVED APRIL 15, 1880, AMENDED MARCH 6, 1883, AMENDED MARCH 9, 1885, AMENDED MARCH 14, 1885, AMENDED MARCH 9, 1887, TO REPEAL ALL LAWS AMENDATORY THEREOF, AND TO PROVIDE FOR THE REORGANIZATION OF EXISTING DISTRICTS AND THE FORMATION OF NEW DISTRICTS.

[Approved March 6, 1889.]

The People of the State of California, represented in Senate and Assembly, do enact as follows:

SECTION 1. Section one of said Act is hereby amended so as to read as follows:

Section 1. The several counties of this State divided and classified into agricultural districts and numbered as follows, to wit: The Counties of San Francisco and Alameda shall constitute Agricultural District No. 1. The Counties of San Joaquin and Stanislaus shall constitute Agricultural District No. 2. The Counties of Butte, Tehama, and Colusa shall constitute Agricultural District No. 3. The Counties of Sonoma and Marin shall constitute Agricultural District No. 4. The Counties of San Mateo and Santa Clara shall constitute Agricultural District No. 5. The Counties of Los Angeles and Ventura shall constitute Agricultural District No. 6. The Counties of Monterey and San Benito shall constitute Agricultural District No. 7. The County of El Dorado shall constitute Agricultural District No. 8. The Counties of Del Norte and Humboldt shall constitute Agricultural District No. 9. The Counties of Siskiyou and Trinity shall constitute Agricultural District No. 10. The Counties of Plumas, Sierra, Lassen, and Modoc shall constitute Agricultural District No. 11. The Counties of Lake and Mendocino shall constitute Agricultural District No. 12. The Counties of Sutter, Yolo, and Yuba shall constitute Agricultural District No. 13. The County of Santa Cruz, save and except that part thereof southeast of the line beginning at a point where the Aptos Creek empties into the Bay of Monterey and extending directly northeast to the boundary line of Santa Clara County, shall constitute Agricultural District No. 14. The Counties of Tulare and Kern shall constitute Agricultural District No. 15. The County of San Luis Obispo shall constitute Agricultural District No. 16. The County of Nevada shall constitute Agricultural District No. 17. The Counties of Alpine, Mono, and Inyo shall constitute Agricultural District No. 18. The County of Santa Barbara shall constitute Agricultural District No. 19. The County of Placer shall constitute Agricultural District No. 20. The Counties of Merced, Mariposa, and Fresno shall constitute Agricultural District No. 21. The County of San Diego shall constitute Agricultural District No. 22. The County of Contra Costa shall constitute Agricultural District No. 23. All that part of Santa Cruz County southeast of a line beginning at a point where the Aptos Creek empties into the Bay of Monterey, and

extending in a direct line northeast to the boundary line of Santa Clara County, shall constitute Agricultural District No. 24. The Counties of Solano and Napa shall constitute Agricultural District No. 25. The Counties of Sacramento and Amador shall constitute Agricultural District No. 26. The County of Shasta shall constitute Agricultural District No. 27. The County of San Bernardino shall constitute Agricultural District No. 28. The Counties of Calaveras and Tuolumne shall constitute Agricultural District No. 29.

SEC. 2. Sections two, three, four, five, six, seven, eight, nine, ten, and eleven of said Act are hereby repealed.

SEC. 3. Sections twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen, and twenty are hereby renumbered as follows, respectively, to wit: Section twelve is hereby numbered two, section thirteen is hereby numbered three, section fourteen is hereby numbered four, section fifteen is hereby numbered five, section sixteen is hereby numbered six, section seventeen is hereby numbered seven, section eighteen is hereby numbered eight, section nineteen is hereby numbered nine, and section twenty is hereby numbered ten.

SEC. 4. All laws amendatory of "An Act to form agricultural districts, to provide for the organization of agricultural associations therein, and for the management and control of the same," approved April fifteenth, eighteen hundred and eighty, and all laws or parts of laws in conflict with this Act are hereby repealed.

SEC. 5. This Act shall take effect and be in force from and after its passage.

AGRICULTURAL DISTRICTS

ORGANIZED UNDER AN ACT APPROVED APRIL 15, 1880, AND AMENDED
MARCH 6, 1883; MARCH 14, 1885; MARCH 9, 1887; MARCH 6, 1889.

- No. 1. The Counties of San Francisco and Alameda shall constitute Agricultural District No. 1.
- No. 2. The Counties of San Joaquin and Stanislaus shall constitute Agricultural District No. 2.
- No. 3. The Counties of Butte, Tehama, and Colusa shall constitute Agricultural District No. 3.
- No. 4. The Counties of Sonoma and Marin shall constitute Agricultural District No. 4.
- No. 5. The Counties of San Mateo and Santa Clara shall constitute Agricultural District No. 5.
- No. 6. The Counties of Los Angeles and Ventura shall constitute Agricultural District No. 6.
- No. 7. The Counties of Monterey and San Benito shall constitute Agricultural District No. 7.
- No. 8. The County of El Dorado shall constitute Agricultural District No. 8.
- No. 9. The Counties of Del Norte and Humboldt shall constitute Agricultural District No. 9.
- No. 10. The Counties of Siskiyou and Trinity shall constitute Agricultural District No. 10.
- No. 11. The Counties of Plumas, Sierra, Lassen, and Modoc shall constitute Agricultural District No. 11.
- No. 12. The Counties of Lake and Mendocino shall constitute Agricultural District No. 12.
- No. 13. The Counties of Sutter, Yolo, and Yuba shall constitute Agricultural District No. 13.
- No. 14. The County of Santa Cruz, save and except that part thereof southeast of the line beginning at a point where the Aptos Creek empties into the Bay of Monterey and extending directly northeast to the boundary line of Santa Clara County, shall constitute Agricultural District No. 14.
- No. 15. The Counties of Tulare and Kern shall constitute Agricultural District No. 15.
- No. 16. The County of San Luis Obispo shall constitute Agricultural District No. 16.
- No. 17. The County of Nevada shall constitute Agricultural District No. 17.
- No. 18. The Counties of Alpine, Mono, and Inyo shall constitute Agricultural District No. 18.
- No. 19. The County of Santa Barbara shall constitute Agricultural District No. 19.
- No. 20. The County of Placer shall constitute Agricultural District No. 20.
- No. 21. The Counties of Merced, Mariposa, and Fresno shall constitute Agricultural District No. 21.
- No. 22. The County of San Diego shall constitute Agricultural District No. 22.
- No. 23. The County of Contra Costa shall constitute Agricultural District No. 23.
- No. 24. All that part of Santa Cruz County southeast of a line beginning at a point where the Aptos Creek empties into the Bay of Monterey, and extending in a direct line northeast to the boundary line of Santa Clara County, shall constitute Agricultural District No. 24.
- No. 25. The Counties of Solano and Napa shall constitute Agricultural District No. 25.
- No. 26. The Counties of Sacramento and Amador shall constitute Agricultural District No. 26.
- No. 27. The County of Shasta shall constitute Agricultural District No. 27.
- No. 28. The County of San Bernardino shall constitute Agricultural District No. 28.
- No. 29. The Counties of Calaveras and Tuolumne shall constitute Agricultural District No. 29.

REPORT.

OFFICE OF THE STATE BOARD OF AGRICULTURE, }
SACRAMENTO, February 1, 1889. }

His Excellency R. W. WATERMAN, Governor of California:

SIR: The closing of our fiscal year on this date makes it incumbent upon us to present a review of our transactions for the term. Herewith is handed the usual statistical matter, together with many other items of interest pertaining to the welfare of the State, as well as our complete financial statement. The reports of the District Agricultural Associations accompany, and form a part of this volume.

The closing of the thirty-fifth year of our existence as a society that was formed to aid and encourage agriculture and mechanical arts, and the improvement of all breeds of live stock, at a period when California was in great need of an organized and coöperative policy on the part of those who had the forethought to inaugurate the encouragement of these industries, that their followers might be benefited and the State put upon a more substantial footing, reminds us that their anticipations were right, and that they labored not in vain.

The year just past has been one of unusual prosperity to our State; in short, the tillers of the soil have had an abundant harvest, and it is safe to say that when this character of success comes among our community, the results in all walks of life are gratifying.

The products of the soil that are here reaped in abundance insures us the prosperity we have. The opportunities and advantages offered to the industrious leave but little chance for failure to those who are attentive and energetic. In no other country are the people favored with climate, soil, and markets as are those of California.

In all occupations contentment reigns supreme, so much so that we are often charged with egotism and exaggeration, whereas they are but the expression of a happy people, and those who come among us and stand shoulder to shoulder in our achievements readily become converts, and are even more enthusiastic than many of the older settlers of this prolific commonwealth.

THE VALUE OF ANNUAL EXHIBITIONS.

The vast increase of interest taken each year in the annual exhibitions given by this Board is a sure indication that our pioneers "built better than they knew." Each season brings renewed vigor, successful experiments, extended facilities, abundance of products, an unusual number of visitors from abroad, and oceans of applications for information regarding our State. In years past it required all our energy to induce exhibits, and all our tact to attract home seekers. The result of this tenacity to make ourselves known has attracted strangers from all parts of the civilized world.

These alluring reports have received the indorsement of the new-comers, and resulted in our success, so that praises sung have had the desired

effect, and we are no longer looked upon as a distant land where the wanderer went to seek pastures anew, but are known in all lands and climes as the land of prosperity and plenty.

The results are made manifest in the large increase of small homes and the cutting up of large tracts of land for this purpose. It is shown by the increased inquiries by new-comers for suitable locations, and by increased shipment of products, that were heretofore little known outside of our own border.

At our annual exhibitions new faces are seen, and the exhilarating effect upon the stranger is noticeable at once; as in the days of old, the gold fever was contagious, so now the land fever, the fruit fever, and the home fever have been spread instead, until the procession of new-comers to this State has taxed the facilities of the transportation companies far in excess of their ordinary capacity to accommodate the travelers.

Our aim each year is to so arrange the exhibition that it shall illustrate to the best advantage the various productive resources of the entire State; our constant study is to most thoroughly inform all by actual observation of the great agricultural capabilities of our soil, the yield of our shops, mines, mills, and forges, to the end that the hesitating settler will be overcome by the facts shown, cast aside all prejudices, and become one of us.

Our extensive pavilion was heretofore looked upon as one out of all proportion, and of greater capacity than was needed, which premonition was predicated upon experience of years past, when the few producers of the State were only induced to exhibit their products by the personal solicitation of the workers that managed the institution. The responses given to these appeals were generally that the growers could sell all their products at their doors, and the vast tracts of land uncultivated were needed for grazing. But, the almost superhuman efforts of the energetic citizens having the management of these exhibitions in hand, has resulted as was best shown by the display made in this great building during the Fair of 1888, when we were overcrowded for space; and had the counties that engaged space not cut down their exhibits, nothing but the products of the soil would have covered the one hundred and twenty-four thousand square feet of floor space. As it was, the display of agricultural, horticultural, viticultural, and mechanical products were never before equaled in this or any other State.

Many of our agricultural implements are unknown outside of this State. Our combined harvesters, that cut, thrash, and sack at one operation the products of our vast grain fields, thereby enabling the farmer to market his yield of grain, if needs be, you might say the day of ripening, illustrates the spirit that predominates in our wide awake California farmer.

THE PROPOSED FOREIGN EXHIBIT.

As has been shown what our efforts are at home in making exhibitions of products a successful stimulant to the growth of our State, the same principle, if properly carried out in foreign lands, would, in our opinion, have the same effect. As the producer was encouraged to produce, he must now produce to encourage and build up markets for the large increase of products. The more products, the more market capacity needed; the more market capacity, the more products. Therefore we believe in every stimulation of a practical nature that will afford increased opportunities to market supplies. We have always advocated object lessons that fully illustrate, by the actual exhibition of products, as more

preferable than printed matter of any character. "To see is to believe," to read is but to think.

An exhibit of California's products in the City of London will awaken a new source of demand that can certainly be met by the abundant supply that is bound to come from our increased acreage each year cultivated, and an interest in the "Old World" that will attract capital for investment not only in the establishment of small homes, but factories of all kinds. The success of one, means a sympathetic movement in all branches of trade; therefore all should be interested in spending the money necessary to make the trial a success.

The advantages offered in making such exhibits are many. A significant index of a future conflict (indeed a present one too) between a higher civilization and despotism, may be readily disarmed in this evolution, and their actions and reactions, in the ownership of land. Whenever direct ownership and indirect ownership come in conflict the latter invariably yields to the former. So true is it that thousands of vessels of bread stuff and meats are regularly sent to Europe from the United States and meet in successful competition similar products of the world which are produced on lands tilled by indirect ownership, and that too in the face of cheap peasant labor. It is highly important that we of California should understand this matter thoroughly, for by so doing we may avail ourselves of advantages greatly to our interest. Great as the advantage is in being able, through the direct ownership of land, to compete in the European markets in breadstuffs and meat, the yet greater achievement presents itself to the growers of California in their ability to compete successfully in the costly products of the vine and fruit tree.

That this can be done may be readily admitted, and if proof is necessary we need only examine the Custom House records for the past few years; two hundred and ten thousand cases of California canned fruits were sold in London in one season. This amount, although seemingly large, is not by any means all that might be sold, provided proper attention is given to the subject; it is only an indication that we can, if we choose, open out avenues that will readily create a demand for all we can produce, and that too at profitable prices. If accomplished, then the inevitable result must be to place California in the front rank of the States of this Union, and that with giant strides. We maintain there is a way to accomplish this, and that way is to carry out the plan proposed of holding this grand exhibition of the products of our soil. The men of action, the men of capital and energy, throughout the State, are of one opinion on this subject, they earnestly favor and indorse this plan; more than that, they desire to see it carried out on a scale at once grand and impressive.

In America the tiller inherits directly the results of his labor. He is careful as to details; his expenses are kept within limit. In short, he gives personal attention to receipts and disbursements, and profits by experience. Whereas, the entailment of large estates in the Old World, under the management of inexperienced men, which, with their inattention to production, results in the consuming by expenses of what would be to our people a profit, nothing but the cheap labor of Europe prevents in the former cases entire failures. So, when competition strikes, they have no way of reducing their extravagant ideas and customs, consequently no reduction of prices can be made; whereas our products, if properly marketed, can be sent over and undersell the home productions, for the reasons assigned.

To educate the people, then, up to this fact, our products must go over in a blaze of glory, as it were. We must do something to attract the

attention of the consumers. We must in so doing prepare our exhibits as to command attention from both press and public. Nor must this be all. The quality of our products sent this far from home must be such that they speak for themselves. Care and attention in packing must be such as to leave no room for doubt that we fully understand our undertaking. It must be fully shown that we come not for a day, but for all time. To send our fruit, poorly canned or dried, means failure. To be sure the methods of the Old World in preserving fruits are ahead of ours, as a rule. To profit by their experience in this industry we must have the opportunity to observe and examine into their methods. Would it not be advisable to have the individual counties that contemplate sending an exhibit on, to each send a Commissioner, selected with a view of gaining knowledge on this subject that would benefit us in future in the packing and preserving of our fruits? As it now is, the producer markets his products in the eastern cities in a green state. Could he not do the same in Europe in their canned and dried state? Say that our goods are properly put up, and the auction plan introduced, how much longer would it take the producer to get returns than it now does on his green fruit? The situation is in his hands; let him not ignore it. Let us profit by the experience of other countries, and let that experience be gained by actual observation.

Take as an example our own exhibition. The farmer attends, observes the different breeds of live stock, he is mindful of the fact that when numerous breeds are together congregated he can best make selection. The particular fancy of a character he admires meets his eye, he purchases with a view of improving his own stock, he is aware that the expense of breeding and raising good stock is no greater than to raise inferior ones, and he profits by his purchase. The seller is encouraged, as he himself began this way, and the result is the taxable property of the State is enhanced, and the \$10, \$20, or \$50 in premiums awarded has been returned many fold. So it will be in the enterprise suggested in making foreign exhibits, and our returns are sure to more than offset the outlay.

FRUIT GROWING AND SHIPPING.

The advancement in this industry during the year past has been most prodigious. The yield from increased acreage, that is now beginning to bear, shows to what extent tree-planting has been in the past few years.

The demand has kept up for our green fruits, and there is a very perceptible increase of canneries and driers.

The plan adopted by the organization of the California Fruit Union in the handling of fruit is, to our mind, a most acceptable one. It is a corporation composed of growers, for the shipping and sale of their products in the East. They have a total stock issue of twelve thousand six hundred and fifty-eight shares, held by four hundred and ninety-nine individuals, scattered through twenty-seven counties. Many, in fact the greater portion, have taken stock for only one quarter their acreage, so as each share represents one acre of land, they handle in reality the products of fifty thousand acres of land set to fruit in this State. So there is little wonder that much competition exists in the Eastern States for the agency of the Union. This fact enables the Union to be very careful in selection and exacting in requirements of those desiring to represent the organization.

In financial affairs the Union has been quite prosperous. They have received during the year from agents some \$20,000 commissions, and have paid out in expenses about \$9,000, leaving a balance on hand of about

\$11,000. As the organization is preëminently a coöperative one, this surplus, instead of swelling the bank account of any corporation or private individual, is returned to the members themselves, after 6 per cent is declared on the stock and 2 per cent reserve is set aside; the residue is divided among those who have shipped with them, in proportion to the amount so shipped by each one. This will amount to a trifle over 1 per cent on the gross sales this season, or will be in reality a return of 1 per cent of the amount of commission charged for handling the product.

In the amount given above for expenses, is included salaries, traveling expenses of their eastern manager, who makes Chicago headquarters during the summer, and has general supervision of all agents, advertising, and business of the Union. The telephone and telegraphing of this organization amounts to about \$3,000 per annum, not a cent of which is charged to members.

The Union charged last season a uniform 10 per cent for handling the fruit; of this the agents received $7\frac{1}{2}$ per cent (out of which is paid auctioneer $2\frac{1}{2}$ per cent at points when auction method of selling is pursued), and the remaining $2\frac{1}{2}$ per cent was returned by the agents to the proper officers of the Union.

Had those who shipped through the Union sent their fruit east on their own account, they would have necessarily paid 10 per cent, just the same, and would in addition have been compelled to pay their own telegraphing, which item often runs \$10 to the car.

It is the intent of the Union in handling the great fruit output of the State to charge a lower commission for the coming year; how low, they are unable to say, but in all probability not to exceed 8 per cent.

The establishing of the auction method of selling our green and perishable products is one of the very best plans yet inaugurated. This plan will lessen the charges and quicken the returns of all fruit handled. This is the principal method used in selling our products in Chicago, which is the chief market so far, although the prospects are good for both New York and Boston, which, with London for our dried and canned fruits, will soon overcome the cry of over production. It is only two years since we made any attempt of selling our fruits at auction in New York and Boston, and the result far exceeded the expectations of the many.

Chicago receives about one half of our fruit product, and this plan of sale enables the buyers from all places adjacent to receive their fresh supply of California fruit without the intervention of the middle man, who profits to the injury of the producer, as by the time, under the old system, our fruit reached the consumer, the price asked was almost prohibitory, so much so that but a small proportion of the people were able to avail themselves of this commodity, thereby lessening the demand to the detriment of the producer. Now, the producer, through the Union, may sell almost direct to the consumer, and be interested in all the profits that accrue.

Our early peaches, apricots, and grapes never sold better than under this system, nor did they arrive at consumers' hands in such good condition. This last season much of the table grape crop was so badly injured before picking, by the excessive heat of July and August, as to render it unfit for shipment. But for this unusual heated term we would have made greater shipments than any previous year. As it was our grapes carried in poorer condition than for years past, and of course sold correspondingly low, and so will bring down the average net for all fruits very materially.

The shipment of carload lots of green deciduous fruit to the Eastern States during the year of 1888, was about nineteen hundred; of this number the Fruit Union, or in other words, the fruit growers, shipped themselves eight hundred and fifty, a gain of ninety carloads over the preceding year. Had grapes carried well, and as all had a reason to believe they would from previous years' experience, the Union would have started one hundred cars more.

The special train service furnished by the transportation companies was excellent in every respect. In point of fact, the time made by the special fruit trains was even better than the passenger train shipments, as these trains were rarely behind time.

This year's experience serves to show that shipment of fruit should not be made in any other way, as delays are often occasioned upon other trains, whereas the special fruit trains have but one object in view, that is to get its load to its destination at the earliest moment possible. This eight to ten days on the road by the old freight train service will not do for this progressive age and increased demand for California fruit.

As shipments increase further reductions will, no doubt, be made in freight rates, when our shippers will be in better condition to compete with our eastern fellow workers in years when, as in the one just closed, they have full crops and can afford to sell their peaches and grapes at $1\frac{1}{2}$ cents per pound, as they did largely the past year. To make our fruit industry fairly prosperous we must now receive 5 cents per pound for the fruit in a wholesale way.

The transportation companies have been taxed to their utmost capacity to provide suitable cars for the handling of our fruit crop in the past. With the thousands of new acres which every year are sending in their quota, the problem is one which the railroad companies only can solve by the most untiring efforts in building new cars.

As an illustration of how various portions of the State are coming into prominence as fruit-producing sections, one has but to glance at the table of shipments showing receipt and distribution of the fruit shipped East for the past season. Instead of a great majority coming from one or two points we now have many places shipping, and the increase has not come from the old established centers, such as Davisville, Natoma, San José, Vacaville, etc., as, with the exception of Sacramento, they are behind the record of 1887, and the increase in the number of cars sent from Sacramento is largely due to an increase of small shipments made from all points there, to be made up in carload lots. We notice on the list many new places as coming into prominence as fruit-shipping points, such as Newcastle, Colfax, Santa Rosa, Cordelia, and Mayhews.

Boston and New York have this year taken, at unusually good prices, all the fruit sent there. The Union alone has put one hundred and thirty-three cars into these two cities, and others have, without doubt, shipped as many more, say in all two hundred and seventy-five carloads, where two years ago fifteen carloads at the best were dispatched to them. This proportion of increase and consumption is certainly very gratifying to those who argue on the negative side of over production.

The total shipment of green fruit from the State during the past season will exceed that of 1887 by about one hundred and twenty-five carloads. Many more would have been shipped, as the fruit was here, but the certainty of a large crop of domestic fruit East, and our inadequate facilities for handling, together with chances of failure as to condition, and the fact that unless the fruit was *fancy* the price would be low, prevented a larger increase of shipments.

More fruit was, in consequence, dried and canned. Heretofore prices for this character of fruit have been low, but from later advices we believe better prices will prevail, and a corresponding increase in shipments will result.

From the Mississippi River eastward they have not experienced up to January, so mild and pleasant a winter for years, a fact which enabled shipments of green fruit, such as apples, etc., to be made in barrels long after it had been customary, and also created a desire for fresh fruit which is not natural when the thermometer is down below zero and the snow many feet deep; consequently, there has not been the call for dried fruits we usually have and expect during the early winter months. But now the green supply has about ceased, and we expect to soon see an upward tendency in dried fruit prices.

Those who grow wine grapes have this year made a decided change in programme, and many instead of selling their grapes for little or nothing, have dried them, and from newspaper reports, the prices offered for this article are much more satisfactory and remunerative than selling them at prices offered in their green state.

The winter so far has been very propitious for an abundant crop of fruit for the coming season, and, barring accidents, with the increased acreage coming into bearing, we should certainly have at a low estimate two thousand cars of deciduous fruits leaving our well favored State.

THE WHEAT CROP.

The year of 1888 opened exceedingly bright for the cereal production of California. The acreage sown to wheat was in the neighborhood of three million two hundred and fifty thousand. Up to April first, the crops, although late, promised well, but the month of April failed to give the desired rainfall that is so much needed by growing grain at that particular time. Instead of rain, the old enemy of the wheat crops—the hot, dry north winds—prevailed most of the entire month. This proved disastrous to young grain, and cost the growers at least one quarter of the acreage seeded. More favorable weather was had in May and June, and in fact up to harvest, that assisted very materially in the maturing of early sown grain. The estimated outcome of wheat in 1888 is about twenty-seven million seven hundred and fifty thousand bushels, as against a yield of nearly twenty-eight million in 1887.

The year of 1888 can be considered as fairly prosperous for our millers, although our trade with China and Japan has been quite seriously cut into by Oregon. As nearly as can be estimated two million barrels of flour were turned out by the mills of this State during the year. The exports show a slight increase over those of 1887, but are considerably below those of 1886. Tables will be found farther on giving the highest, lowest, and average prices during each month of the year for No. 1 white wheat, spot; also, tables giving the highest and lowest prices of No. 1 feed barley during each month of the various options dealt in at the San Francisco Produce Exchange Call Board Association, for which, with other data connected therewith, we are indebted to Mr. T. C. Friedlander, the obliging Secretary.

METEOROLOGICAL DEPARTMENT.

This society has from its own resources, ably assisted by Sergeant James A. Barwick, United States Signal Service Observer at Sacramento, issued a report in pamphlet form for the years 1884, 1885, 1886, and 1887, and

the present report for 1888 being five volumes of climatic matter, culled and compiled from various and reliable sources, and replete with meteorological lore, including brief, though accurate, descriptions of each county of the State. This society feels proud of its efforts on behalf of the State to furnish reliable and full data on the peculiar features, conditions, and variety of its numerous climates, for it cannot be said, as of many other States, "*the climate*," but *the climates* of California.

This State, as those who know it in a meteorological sense know full well, can suit the most fastidious and finical hunters after climate, for if the coast does not suit them, they can try the valleys, and if not suited there, they can hie to the mountains and climb to the eyrie of that noble bird, the great American eagle, that soars and builds its nest upon the highest pinnacle of this continent, and which is a fit emblem of this country.

This State needs a weather service controlled by itself, so as to be enabled to investigate scientifically the peculiarities of its climate, and also to discover and define what is termed the frost-belt in and along our foothills. Our back reports afford such indisputable evidence that a State Weather Service and Crop Report is necessary, that it is needless to dwell longer on the subject.

The people of this State owe very much to Sergeant Barwick for his untiring and steady devotion to the gathering and compiling of the most complete State weather records of any State in the Union, not even excepting those which have a State Weather Service; and as the Sergeant's services have been entirely gratuitous for the past seven years, it is certainly asking too much of him to continue his full and complete annual reports to this society without compensation. And here is where the State should step in and take a hand in the matter of gathering weather records, by having a Weather Department attached to the State Agricultural Society, and obtain the services of the Sergeant through General Greeley, the Chief Signal Officer, to assist in its organization. Our annual reports are constantly being called for from other States and foreign countries on account of its weather records.

LIVE STOCK.

One of the first and most staple interests is the breeding of all classes of live stock, in California, and the future promises exceptionally fine prospects.

The various improved breeds of horned stock here have such prominence that insures us the commercial standing given other States less favored with advantages, an impetus resulting exceedingly remunerative to the breeders of cattle.

The "breeding up" of cattle is an advantage that those interested are not slow to accept. The introduction and crossing of pure blood in all classes, with a view of improving the beef and milk qualities, is the constant study of successful breeders of cattle, and the increased herds of this character that are each season on exhibition at the State Fair is an example of what is being accomplished in this respect. It is a highly interesting part of the exhibition, and one that attracts the attention of all lovers of high-bred stock.

With our large area of grazing lands we are in a better condition to breed on an extensive scale, not only cattle, but sheep, goats, and swine, than are many of our sister States. But as new interests are now attracting the land owners, the raising of sheep and swine has to some extent

come to be neglected. Where formerly this interest was leading, it is now carried on by comparatively few.

The business of the breeding and raising of horses of all kinds, from the fleetly thoroughbred to the powerful Clyde, is on the increase, and is one of our most successful industries. There is money to be made in this business, as the farmer who, by improved breeding, is enabled to sell his surplus stock at good prices, can readily substantiate, while those who make it a business complain not of the returns made each season.

In addition to the many staple classes of live stock here bred we are fast assuming the lead in the breeding of a class that is commanding the attention of all lovers of that noble animal—the thoroughbred—throughout the United States, thereby creating a market for an additional resource for which by reason of climate we are especially adapted to produce.

The sales by public auction of this one breed of stock, in yearling form, for the season of 1888 in the United States amounted to \$520,230, there being seven hundred and seventy-nine head sold for this sum, and they the get of but one hundred and twenty-two stallions, showing an average of \$667 82. A grand result taking the number into consideration.

One of our principal breeders, taking advantage of the increased demand, sold about seventy head of yearling racing colts for \$112,000, at an average of about \$1,600 per head—a phenomenal sale. This event will give California the standing she is entitled to in this important industry. These annual sales are a most desirable method, and one which has given Kentucky a world renowned reputation as a breeding State, and they have already drawn attention to the produce of California by those who are desirous of obtaining the produce of our well established breeding farms where all can avail themselves of the blood that has proven successful on the turf.

The turf interest to this State is of some magnitude, and should be encouraged in every possible way. The breeding and sale of race horses is as much of a resource as any other production, and by proper encouragement can be made valuable to our now prosperous State. This interest gave England a prominence that will last for ages. She is the parent of this most fashionable breed of animals. Kentucky was and is still the favored spot of America in this interest; but California is fast approaching an era when the home of the thoroughbred will here be located; when those who are seeking the pure blooded, well muscled colts are bound to come to purchase. California now has the reputation of not only producing the various necessities of life, but likewise the principal luxuries. The race horse is a luxury, and necessarily high priced, which to the producer is a grand fault (?), and he can well afford to have it so.

The raising of standard bred and roadster classes of horses is likewise an important factor in this State; the prominence given some of our youngsters abroad has turned the attention of this class of buyers to our shores. These light harness classes are desirable in all sections of the country, and the sales each season of California bred ones are regular and remunerative to the breeder.

The breeding of the heavier classes of horses is one of the best paying investments that could be made. The demand for truck and delivery wagon animals is continual. One of our breeders of this character sells at public sale from \$30,000 to \$40,000 annually.

It is thus apparent that live stock breeding in this State, of the kind and character in demand, is in itself one of our greatest industries, and one which we desire to encourage in every possible way.

QUARANTINE LAWS.

Accompanying this report will be found one from Thos. Bowhill, M. R. C. V. S., upon the diseases of live stock in the State. It is clearly shown by examinations made that we have in our midst anthrax and Texas fever among the cattle, and cholera in swine.

It is highly necessary that action should be had at once for the extirpation of these plagues. Stringent quarantine laws would, in our opinion, be great assistance in preventing the importation, when the necessary remedies could be applied to eradicate the diseases now here. The appointment of a State Veterinarian is one of the first steps necessary, as nearly every case afflicted can be traced to importation. Stop this, burn all carcasses of animals dying with disease, destroy all afflicted, and burn the ranges traversed, this plague can be easily stamped out. Until quarantine is placed on all stock coming into the State, it is useless to attempt its destruction, as the disease travels faster than remedies unless check is placed on the fountain head.

COUNTY EXHIBITS.

Individual counties showing their productive qualities in competition at the State Fair each year, is a portion of the exhibition that much care and attention is given to by this Board, and it is with great difficulty that the committees arrive at a decision upon the superiority, so nearly equal are exhibits.

The tasty arrangement and great quantity of diversified products makes this department of our exhibition the most attractive. A complete report by counties is herein given among the valuable papers published in this report. As our province is to furnish all information possible on the productive quality of our State, no better table of statistics could be prepared than the report made upon the exhibits of the many counties at the Fair of 1888. It is our intention, as fast as resources will permit, to increase the awards in this department, as the money could not be used to a better advantage than by encouraging in this way the growing of superior products.

PERMANENT IMPROVEMENTS.

The keeping up of a great property like that under the supervision of this Board is in itself no small item of expense, and as the payment for necessary improvements thereto must come out of the profits of our exhibitions, irrespective of the money appropriated by the State, it is only with the most careful management that we are able to keep pace with the wants in this regard. The expenditures for building and improvements the past year amounts to \$18,642 42. Nearly this entire amount was expended in raising and otherwise improving the grand and special stands at Park grounds. These improvements were absolutely necessary, as the structures were fast approaching decay.

The money necessary for expenditures of this character is supplied upon the personal security of members of this Board, who risk its return from the resources of the society. The State does not permit the money by them given in aid to be expended for permanent improvements; consequently it is to the interest of the members of this Board to see that the management is such as will justify them in assuming these personal risks.

During the past eight years this item has been of no small amount, there having been expended on this account, exclusive of special appropriations by State and city for the construction of the exhibition building, nearly \$100,000. It is our intention to make still further improvements by the construction of new stabling at the Park as soon as circumstances will permit.

STATE APPROPRIATIONS.

Contrary to the expectation of many, the State does not pay one dollar expended by this Board, over and above the amount appropriated for the aid of this society. Nor is it liable in any way for indebtedness incurred. The receipts and disbursements amount each year to from \$60,000 to \$75,000, whereas the amount appropriated by the State, as aid, amounts to but \$17,500, of which \$2,500 is for the care and insurance of the exhibition building, leaving \$15,000, which amount is devoted to the payment of premiums (exclusive of racing). Thus the State money is returned to the producers, after doing valuable service. We call your attention to these facts, to show that whatever money is received from the State is expended in a manner that should meet the approval of all. At least, we are perfectly satisfied to have comparisons drawn between this and other institutions aided by the State, in the expenditure of State funds.

EXPERTS' REPORT.

The Board of Directors has caused the books and accounts to be thoroughly examined and expeted during the incumbency of the present Secretary. The experts selected for this work were Mr. A. W. Bell, of the First National Bank of Stockton, and J. M. La Rue, Esq., Secretary of the San Joaquin Valley Agricultural Association, both of whom are expert accountants of many years' experience. After several weeks of continued labor these gentlemen submitted the following report:

Hon. L. U. SHIPPEE, President State Agricultural Society:

SIR: The undersigned, having been requested by you to fully and carefully examine the books and accounts of the Secretary of the State Agricultural Society, beg to submit the following report:

Our work began with the fiscal year commencing February 1, 1881, and our study and examination of the books, accounts, and all financial transactions of the society extended from that date up to and including December 31, 1887.

We had full access to all the books and accounts of the society, and to any and all memoranda desired or asked for, and we believe made a complete and thorough examination.

The source of the receipts of the society was a matter that received our closest attention, and it was found that everything was accounted for, with the exception of \$3,037 75 on September 16, 1882, which was erroneously entered as \$3,037 35.

All disbursements are represented by correct vouchers produced by the Secretary, and thoroughly examined by us, but we found that voucher No. 156 of 1883 showed the following amount as having been paid: \$17 26, which was charged up as \$13 56, leaving a balance in favor of the Secretary of \$3 70.

The system of keeping the accounts adopted in August, 1881, and pursued to date of the termination our work, is as nearly complete as may be,

especially considering the fact of the volume of business necessary to be transacted, and the handling of large and small sums of money during the limited space of time permitted during the State Fair.

The system used for the receipts and disbursements of moneys that pertained to the speed contests is particularly creditable to the officer responsible, no error being found that was detrimental to the society, and only one that could be to its patrons, and that was corrected immediately after its discovery and the proper voucher shown for it.

We find the total number of premiums unpaid and uncharged to be \$388—from 1881 to 1887, both years included. All other claims and accounts appearing against the society, exclusive of those shown in the profit and loss account, and balance sheet for 1887, are paid and vouchers on file. We append herewith a full statement of receipts and disbursements, together with the profit and loss account for each year, showing in the latter account a loss of \$5,285 69 on December 31, 1887, being the net loss (showing indebtedness on this date) for the years 1881 to 1887, inclusive.

We find that the amount of the appropriations received from the State of California from 1881 to 1887 was \$77,500; that the amount paid for premiums was \$77,995 36, and, further, that the disbursements on account of permanent improvements made by the society, exclusive of the appropriations made by the citizens of Sacramento and of the State of California for the building of the exhibition building, have been up to December 31, 1887, \$57,382 87. We inclose herewith the balance sheets for the several years named in this report, with our signatures attached to same, which have been in our possession since proof.

Respectfully submitted.

[Signed:]

ARTHUR W. BELL,

J. M. LA RUE,

Accountants.

INDEBTEDNESS.

The continual improvements to the property under the supervision of this Board, made necessary by its long usage, compels us to expend each year more than our resources will permit, in order to render the property useful. It is our intention to continue these improvements until the property has an appearance in keeping with the age and not the dilapidated look of twenty-five years use.

On February 1, 1888, our indebtedness was	\$5,968 28
Expended in building and improvements 1888.....	18,642 42
Making total indebtedness September 1, 1888.....	\$24,610 70

At the end of the fiscal year February 1, 1889, we find our assets and liabilities as follows:

<i>Liabilities.</i>	
D. O. Mills & Co., loan.....	\$6,991 68
Bills payable account.....	8,028 26
Stakes due, race accounts	2,880 00
	<u>\$17,899 94</u>
<i>Assets.</i>	
Entrances due, account races.....	\$2,260 00
Bills receivable.....	401 66
Cash	901 31
	<u>\$3,562 97</u>
Net indebtedness, February 1, 1889	\$14,336 97

Showing net gain for the year to be as follows:

Indebtedness, September 1, 1888	\$24,610 70
Indebtedness, February 1, 1889	14,336 97
Net gain for 1888.....	\$10,273 73

RESUMÉ.

It is with much gratification that we note the progress made, likewise the interest taken by the public in our exhibitions each year. Our methods are progressive, and no doubt faults exist, but to all who are of the belief that a public institution can be so managed as to satisfy every one, we can but say that theory and practice are at great variance in this respect. The time given by the members of the Board in aiding the development of the State's resources, is by no means a small item. The amount of business transacted each year may not impress the casual observer with its magnitude, but a little calm reflection and careful review of the multifarious labors performed in the extensive sphere under the jurisdiction of this Board, can but convince that our achievements are an adequate reward for the efforts put forth, and in full keeping with the dignity of the State, and the world-wide renown so rapidly being acquired by California.

We append our financial statement in detail, to which we invite careful inspection:

FINANCIAL SUMMARY.

Amount on hand at commencement of year	\$409 15
Total receipts from all sources	92,391 73
	<u>\$92,800 88</u>
Total disbursements	\$91,899 57
Cash on hand	901 31
	<u>\$92,800 88</u>

EDWIN F. SMITH,
Secretary.

L. U. SHIPPEE,
President.

FINANCIAL STATEMENT.

FEBRUARY 1, 1888, TO JANUARY 31, 1889.

SUMMARY.

RECEIPTS.

1888.		
Feb. 1—	Cash balance.....	\$409 15
	Rent of Park.....	\$3,950 00
	Race entries, forfeits, etc.....	16,720 00
	Running stakes, 1889-90.....	305 00
	Occident stakes, 1889-90-91.....	1,455 00
	Park and Pavilion receipts during Fair.....	36,393 00
	Premiums and care of exposition building—State war- rants and rebates.....	17,570 00
	Expense account rebates.....	184 63
	Building and improvement accounts, sale of wood, re- bates, etc.....	448 16
	Bills payable.....	8,028 26
	Bills receivable.....	346 00
	D. O. Mills & Co., current loan.....	6,991 68
		<u>\$92,391 73</u>
		<u>\$92,800 88</u>

DISBURSEMENTS.

	Building and improvements.....	\$19,090 58
	Expenses.....	15,435 44
	Premiums paid (exclusive of racing).....	14,256 98
	Race account, purses, stakes, forfeits, and added money.....	25,560 00
	Salaries.....	4,787 60
	Bills payable (balance due on note of 1884).....	4,500 00
	Insurance.....	1,455 05
	Interest.....	1,050 11
	Advertising.....	1,973 72
	Entrances due, account races 1888.....	405 00
	Occident stake, 1888, account collections made 1886 and 1887.....	885 00
	Occident stake, 1889, return of stakes account death.....	35 00
	California annual stake, 1888, account declarations.....	10 00
	California Derby stake, 1888, account declarations.....	80 00
	Bills receivable.....	201 66
	D. O. Mills & Co., account O. & D. of 1887.....	2,148 43
	Park and Pavilion receipts, account rebate L. M.....	25 00
1889.		
Feb. 1—	Cash balance.....	901 31
		<u>\$92,800 88</u>

RECEIPTS.

1888.		
Feb. 1—	Cash balance.....	\$409 15
	RENT.	
	Rent of Park, twelve months.....	\$3,850 00
	Rent of Pavilion.....	100 00
		<u>\$3,950 00</u>
	RACES.	
Race No. 1—	Entrances, stakes, and forfeits received.....	\$1,120 00
Race No. 2—	Entrances, stakes, and forfeits received.....	840 00
Race No. 3—	Entrances, stakes, and forfeits received.....	480 00
Race No. 4—	Entrances, stakes, and forfeits received.....	260 00
	Amount carried forward.....	<u>\$2,700 00</u>
		<u>\$4,359 15</u>

Amount brought forward	\$2,700 00	\$4,359 15
Race No. 5—Entrances, stakes, and forfeits received	225 00	
Race No. 6—Entrances, stakes, and forfeits received	450 00	
Race No. 7—Entrances, stakes, and forfeits received	50 00	
Race No. 8—Entrances, stakes, and forfeits received	430 00	
Race No. 9—Entrances, stakes, and forfeits received	2,250 00	
Race No. 10—Entrances, stakes, and forfeits received	1,000 00	
Race No. 11—Entrances, stakes, and forfeits received	670 00	
Race No. 12—Entrances, stakes, and forfeits received	750 00	
Race No. 13—Entrances, stakes, and forfeits received	690 00	
Race No. 14—Entrances, stakes, and forfeits received	150 00	
Race No. 15—Entrances, stakes, and forfeits received	975 00	
Race No. 16—Entrances, stakes, and forfeits received	600 00	
Race No. 17—Entrances, stakes, and forfeits received	700 00	
Race No. 18—Entrances, stakes, and forfeits received	165 00	
Race No. 19—Entrances, stakes, and forfeits received	350 00	
Race No. 20—Entrances, stakes, and forfeits received	330 00	
Race No. 21—Entrances, stakes, and forfeits received	180 00	
Race No. 22—Entrances, stakes, and forfeits received	900 00	
Race No. 23—Entrances, stakes, and forfeits received	650 00	
Race No. 24—Entrances, stakes, and forfeits received	640 00	
Race No. 25—Entrances, stakes, and forfeits received	580 00	
Race No. 26—Entrances, stakes, and forfeits received	490 00	
Race No. 27—Entrances, stakes, and forfeits received	205 00	
Race No. 28—Entrances, stakes, and forfeits received	540 00	
Race No. 29—Entrances, stakes, and forfeits received	50 00	
		\$16,720 00

Running Stakes of 1889-90.

The President stake, payments received	\$225 00	
The California Derby, 1889, account declarations	60 00	
The California Breeders' stake, 1889, account declarations	20 00	
		\$305 00

Occident Stakes, 1889-90-91.

Payments made in 1888 in Occident for 1889	\$230 00	
Payments made in 1888 in Occident for 1890	595 00	
Payments made in 1888 in Occident for 1891	630 00	
		\$1,455 00

PARK AND PAVILION RECEIPTS.

June 30—Printing and Pavilion privileges		\$881 00
Sept. 1—Life membership, Matt F. Johnson	\$50 00	
4—Life membership, H. R. Crouch	50 00	
Life membership, R. H. Hawley	50 00	
Life membership, Walter E. Brown	50 00	
Life membership, Louis Nicolaus	50 00	
Life membership, August Heilbron	50 00	
Sept. 5—Life membership, F. C. Knauer	50 00	
7—Life membership, C. C. Perkins	50 00	
Life membership, Wm. Dwyer	50 00	
Life membership, Geo. E. Erhart	50 00	
Life membership, Frank Bergman	50 00	
Life membership, W. S. Jacobs	50 00	
Life membership, J. H. Wieland	50 00	
Life membership, A. Meister	50 00	
Life membership, E. C. Atkinson	50 00	
		\$750 00
Sept. 3—Double season tickets	\$1,045 00	
4—Double season tickets	970 00	
5—Double season tickets	1,025 00	
6—Double season tickets	1,805 00	
7—Double season tickets	790 00	
8—Double season tickets	445 00	
10—Double season tickets	470 00	
11—Double season tickets	195 00	
12—Double season tickets	140 00	
13—Double season tickets	123 00	
14—Double season tickets	33 00	
15—Double season tickets (entry clerks)	525 00	
		\$7,576 00
Sept. 3—Single season tickets	\$72 00	
4—Single season tickets	99 00	
5—Single season tickets	90 00	

Amount carried forward	\$261 00	\$32,046 15
------------------------------	----------	-------------

	Amount brought forward	\$261 00	\$32,046 15
Sept.	6—Single season tickets	456 00	
	7—Single season tickets	222 00	
	8—Single season tickets	99 00	
	10—Single season tickets	183 00	
	11—Single season tickets	51 00	
	12—Single season tickets	60 00	
	13—Single season tickets	33 00	
	14—Single season tickets	6 00	
			\$1,371 00
Sept.	4—Children's tickets	\$0 25	
	5—Children's tickets	1 50	
	6—Children's tickets	8 00	
	7—Children's tickets	15 50	
	8—Children's tickets	16 75	
	10—Children's tickets	30 75	
	11—Children's tickets	19 50	
	12—Children's tickets	33 50	
	13—Children's tickets	35 50	
	14—Children's tickets	30 25	
	15—Children's tickets	19 75	
			\$211 25
Sept.	3—Single admission tickets	\$14 00	
	4—Single admission tickets	55 00	
	5—Single admission tickets	127 00	
	6—Single admission tickets	794 50	
	7—Single admission tickets	944 00	
	8—Single admission tickets	1,387 00	
	10—Single admission tickets	1,958 00	
	11—Single admission tickets	1,199 50	
	12—Single admission tickets	2,669 50	
	13—Single admission tickets	2,354 00	
	14—Single admission tickets	2,168 00	
	15—Single admission tickets	924 50	
			\$14,575 00
Sept.	6—Grand stand receipts	\$132 00	
	7—Grand stand receipts	150 00	
	8—Grand stand receipts	224 00	
	10—Grand stand receipts	337 00	
	11—Grand stand receipts	186 00	
	12—Grand stand receipts	230 00	
	13—Grand stand receipts	372 50	
	14—Grand stand receipts	332 50	
	15—Grand stand receipts	36 50	
			\$2,000 50
Sept.	6—Quarter-stretch badges	\$160 00	
	7—Quarter-stretch badges	55 00	
	8—Quarter-stretch badges	20 00	
	10—Quarter-stretch badges	10 00	
	11—Quarter-stretch badges	15 00	
	12—Quarter-stretch badges	10 00	
	13—Quarter-stretch badges	3 00	
	14—Quarter-stretch badges	2 00	
			\$275 00
Sept.	6—Special stand receipts	\$69 00	
	7—Special stand receipts	16 00	
	8—Special stand receipts	18 50	
	10—Special stand receipts	41 00	
	11—Special stand receipts	16 50	
	12—Special stand receipts	25 50	
	13—Special stand receipts	49 50	
	14—Special stand receipts	37 50	
	15—Special stand receipts	3 00	
	(At office)	78 00	
			\$354 50
Sept.	10—Carriage badges	\$9 00	
	15—Pool privilege	6,878 15	
	Programmes and Park privileges	1,178 30	
	Sweepstakes (premiums)	249 00	
	Art catalogue and Pavilion privileges	84 30	
			\$8,398 75
	Amount carried forward		\$59,232 15

Amount brought forward		\$59,232 15	
<i>Premiums.</i>			
Sept. 15—Rebate		\$10 00	
Specials		60 00	
State warrant		17,500 00	
			\$17,570 00
<i>Expense.</i>			
Mar. 31—Sale of hay		\$45 18	
Sept. 8—Damage to Pavilion chairs paid by Pastors' Union		15 00	
17—Hay and straw sold at Park		75 65	
Team at Park		12 20	
Wood at Park		2 00	
18—Hay at Park		16 50	
21—Hay at Park		8 10	
19—Wood at Park		10 00	
			\$184 63
<i>Building and Improvements.</i>			
June 4—Sale of house and barn to L. Howe		\$100 00	
14—Sale of wood by Superintendent Pierson		43 50	
18—Sale of wood by Superintendent Pierson		5 50	
30—Sale of wood by Superintendent Pierson		13 00	
July 16—Sale of wood by Superintendent Pierson		25 00	
Sale of wood by Superintendent Pierson		19 00	
Aug. 31—Sale of wood by Superintendent Pierson		40 50	
Building and repairs, account City of Sacramento		201 66	
			\$448 16
<i>Bills Payable.</i>			
Oct. 4—Richards & Knox, account of lumber		\$3,182 61	
Sullivan, Kelly & Co., account of paints and oil		961 31	
Huntington-Hopkins Company, hardware		541 48	
Friend & Terry Lumber Company, account of lumber		1,017 25	
Nov. 19—Sacramento Lumber Company, account of lumber		1,360 58	
Dec. 31—W. K. Vanderslice & Co., account of medals		965 04	
			\$8,028 26
<i>Bills Receivable.</i>			
Mar. 30—A. J. Rhoads, note, account of rent		\$346 00	
			\$346 00
<i>D. O. Mills & Co.</i>			
1889.			
Jan. 31—Overdraft balance		\$6,991 68	
			\$6,991 68
			\$92,800 88

DISBURSEMENTS.

<i>Building and Improvements.</i>			
Remodeling grand and special stands at Park, per specifications		\$8,589 49	
Extra work not included in original specifications:			
For raising Superintendent's office, building entry clerk's office, repairing sidewalk, new stairways, temporary boarding house, etc., pool and cigar stands, enlarging Director's stand, work on chairs for special stand, water-closets and screens, chimneys, filling in under special stand, plumbing and extra repair work		3,228 00	
Making new tools		100 00	
Building Judge's stand		717 20	
New addition to park and grounds, including fence, building, and stalls		2,621 33	
New tank and piping, and pipe for new addition, and tearing down old tank		849 14	
New troughs, tubs, and general repairs around grounds		884 71	
Clearing up debris, cartage, materials, tools, etc.		395 05	
Salary of Superintendent		300 00	
Drawing specifications, etc.		100 00	
New floor in conservatory at Pavilion, new tables, etc.		1,305 66	
			\$19,090 58
Amount carried forward			\$19,090 58

Amount brought forward \$19,090 58

Expense Account.

1888.		
Feb.	4—Hook & Son, repairs	\$10 00
	5—M. F. Johnson, legal services	19 00
	26—George Martin, Park watch	50 00
	28—Sundries	10 10
March	6—H. S. Crocker & Co., merchandise	27 50
	6—Holbrook, Merrill & Stetson, merchandise	28 10
	31—Sundries for the month	35 90
April	7—H. Latham, expenses account county exhibits	50 00
	27—Weinstock & Lubin, expense	20 00
	30—E. P. Cole, legal services	250 00
	30—Sundry monthly accounts	45 10
May	29—Painting smoke stack	20 00
	29—Sundry monthly bills	40 15
June	14—Dr. H. Latham, expenses account county exhibits	50 00
	18—Whittier, Fuller & Co., merchandise	71 20
	30—Sundry small accounts	20 00
July	10—One shorthorn herd book	8 00
	12—C. Herndon, extra watchman	6 00
	15—Telephone account, three months	16 65
	30—Sundry monthly accounts	66 15
	31—W. J. Parker, hay for team	26 00
Aug.	6—National Trotting Association dues	156 00
	9—Dr. H. Latham, county exhibit expenses	275 00
	W. F. Smith, services	50 00
Sept.	1—M. F. Johnson, legal services	50 00
	Sundry small accounts for August	52 75
Sept.	15—J. F. B. McCleery, billiard exhibitions	65 00
	17—First Artillery Band, music	990 00
	J. F. Toomey, transportation for ticket clerks	31 00
	George Boyne, decorating building	330 00
	William Curtis, 79 tons oat hay, at \$12	948 00
	B. A. Johnson, account Directors' stand	349 70
	C. S. Crittenden, services as starter	95 00
	L. B. Clark, 78½ tons stubble straw, at \$6 50	510 25
	Prizes for baseball contest	60 00
	William Curtis, 4,165 lbs. oat hay, at \$12	25 00
		\$4,827 55

Pavilion Payroll.

Sept.	17—O. P. Dodge, Assistant Superintendent	\$146 50
	J. S. Miller, Financial Secretary	75 00
	Norton Bush, Superintendent Art Department	250 00
	H. F. Pierson, Superintendent Machinery Hall	80 00
	J. F. Slater, entry clerk	90 00
	W. W. Greer, entry clerk	90 00
	Samuel Blair, entry clerk	89 00
	C. H. Green, chief ticket clerk	60 00
	E. P. Howe, assistant ticket clerk	30 00
	Lee Brown, assistant ticket clerk	30 00
	A. Keithly, doorkeeper	48 00
	J. P. Watkins, doorkeeper	49 50
	H. W. Shea, doorkeeper	47 50
	T. T. Burnett, doorkeeper	9 00
	C. B. Herndon, doorkeeper	9 00
	T. C. Pockman, doorkeeper Machinery Department	37 50
	C. T. Sprague, doorkeeper Machinery Department	35 00
	H. Bagwell, doorkeeper Machinery Department	28 00
	G. W. Waldron, membership ticket clerk	12 00
	C. H. Green, ticket counter	27 00
	Mrs. V. Johnson, ladies' room	24 00
	P. Nash, night watch	42 00
	C. B. Herndon, night watch	12 50
	W. C. Holt, night watch machinery	37 50
	A. J. Muir, gasman	20 00
	T. C. Raglan, watchman	5 00
	W. F. Jorgensen, laborer Art Department	19 50
	P. Memegoena, laborer Art Department	44 50
	E. M. Atkinson, messenger	33 00
	L. T. Hatfield, foreman	57 00
Amount carried forward		\$1,538 00
		\$23,918 13

	Amount brought forward	\$1,538 00	\$23,918 13
Sept. 17—	John Ireland, laborer	33 50	
	Nat Christopher, laborer	2 50	
	W. A. Smith, laborer	64 00	
	Robert Harvey, laborer	67 50	
	C. C. Folger, laborer	65 00	
	W. M. Smith, laborer	60 75	
	Frank Nold, laborer	68 00	
	T. C. Raglan, laborer	66 50	
	L. L. Forrest, laborer	57 50	
	S. Addison, laborer	60 50	
	J. N. Herndon, laborer	63 00	
	Hiram Clock, laborer	46 50	
	T. M. Prior, laborer	59 50	
	William Jones, laborer	42 00	
	Joseph Harris, laborer	43 00	
	E. Matheur, laborer	42 00	
	L. Moreno, laborer	37 00	
	T. H. Lambert, laborer	12 50	
	N. Ross, laborer	32 00	
	N. M. Wooly, laborer	14 50	
	W. F. Jorgensen, laborer	31 00	
	William Keithley, laborer	32 50	
	Messenger for Dodge	6 00	
	A. F. Thull, carpenters' foreman	72 80	
	John Phoff, carpenter	32 75	
	F. Richmond, carpenter	7 50	
	C. J. Gardman, carpenter	32 70	
	Sam Stouns, carpenter	18 00	
	S. A. Rice, carpenter	31 29	
	J. R. Parker, carpenter	39 30	
	H. Feon, carpenter	19 20	
	A. W. Love, carpenter	19 20	
	Charles Thomas, carpenter	3 00	
	Fred Nold, laborer Machinery Department	55 00	
	M. Lucy, laborer Machinery Department	46 00	
	E. C. Cook, laborer Machinery Department	35 00	
	Hugh Davis, laborer Machinery Department	13 00	
	John Bateman, laborer Machinery Department	2 00	
			\$2,971 85

Park Payroll.

A. G. Folger, Assistant Superintendent	\$85 00	
A. H. Estill, clerk of course	45 00	
H. M. La Rue, Jr., entry clerk	65 00	
James C. Kelly, chief ticket clerk	45 00	
B. F. Hancock, assistant ticket clerk	22 50	
Albert Pait, assistant ticket clerk	22 50	
George Waldron, membership ticket clerk	36 00	
E. M. Atkinson, assistant membership ticket clerk	22 50	
William Nixon, ticket clerk special stand	22 50	
Robert Sullivan, ticket seller	13 50	
A. Spencer, ticket seller	13 50	
Walter Toomey, ticket seller	13 50	
A. Trainor, ticket seller	13 50	
A. Roblin, ticket seller	13 50	
Harry Williams, ticket seller	13 50	
George Poorman, Assistant Marshal	45 00	
George S. Milliken, Assistant Marshal	45 00	
M. Judge, Assistant Marshal	45 00	
John La Rue, groom badge clerk	30 00	
James C. Stovall, forage clerk	42 00	
George Boyver, milk test clerk	14 00	
A. F. Dray, usher special stand	18 00	
Ralph Hoyt, stairman special stand	22 50	
Paul Maslin, usher Directors stand	18 00	
A. G. Hamilton, blackboard clerk	18 00	
James N. Holl, blackboard clerk	18 00	
L. Whiting, Judges' stand	31 50	
Chas. Paine, weighmaster	32 50	
Carter Jackson, day hay watch	32 50	
Wm. Nonnan, night hay watch	40 00	
C. V. Garret, poultry watch	27 50	
Amount carried forward	\$926 50	\$26,889 98

	Amount brought forward	\$926 50	\$26,889 98
Sept. 17—	W. Walters and team, hay delivery	58 00	
	A. Doermey, hay delivery help	28 00	
	Wm. Grant, rear porter grand stand	20 00	
	Jos. Williams, rear porter grand stand	20 00	
	Jas. Drummond, rear porter grand stand	20 00	
	P. O'Meara, fire night watch	33 00	
	H. A. Guthin, fire day watch	30 00	
	T. T. Burnett, gatekeeper	45 00	
	C. B. Herndon, gatekeeper	45 00	
	Jerome Myers, gatekeeper	45 00	
	A. McCloud, gatekeeper	45 00	
	Jno. Shellars, gatekeeper	45 00	
	R. H. Newton, quarter-stretch	45 00	
	D. M. Walker, stairman	21 50	
	S. C. Clough, stairman	21 50	
	A. Foley, exit gate	22 50	
	W. M. Willard, exit gate	22 50	
	D. P. Coon, quarter-stretch track gate	18 00	
	R. May, quarter-stretch gate	18 00	
	Geo. Ritchie, quarter-stretch gate	18 00	
	Dan Foley, track entrance gate	18 00	
	L. Sheehan, back gate	18 00	
	Wm. Avery, gate Judges' stand	18 00	
	J. J. Cahill, stairman grand stand	21 50	
	D. H. White, grand stand	21 50	
	Jno. Perry, grand stand	21 50	
	C. Weinrich, ticket taker grand stand	21 50	
	Chas. Feyhl, ticket taker grand stand	21 50	
	C. Clark, stairman grand stand	10 00	
	J. S. Adams, garbage team	16 00	
	J. Bollenbacker, carpenter	48 00	
	T. Suchan, carpenter helper	28 00	
	M. O'Meara, cartage on hose cart	2 00	
	A. Grubbs, cartage and care of grand stand	25 00	
	R. C. Ferguson, cleaning stands during Fair	80 00	
	H. Haldrick, team and helper on track	138 00	
	J. Millay, laborer	6 00	
	J. M. Sullivan, detective	45 00	
	John Ward, police	18 00	
	C. Petrie, police	16 00	
	P. F. Dolan, police	18 00	
	P. J. Brown, police	18 00	
	D. M. Cox, police	18 00	
	Dan Moran, police	18 00	
	Wiley Moss, police	18 00	
	L. Spurgeon, police	18 00	
	Jas. Patterson, police	18 00	
	R. Corsaw, police	18 00	
	H. J. Roach, police	18 00	
	A. Greer, police	24 00	
	John Kofford, police	18 00	
	J. E. Gould, police	18 00	
	Henry Myers, police	18 00	
	A. N. Foote, police	18 00	
	Jno. Mullery, police	18 00	
	Wm. Burns, police	16 00	
	R. Strouch, police	16 00	
			\$2,449 00

Expense Account Continued.

Sept. 30—	Kullman, Salz & Co., tanbark	\$67 50	
	John Rooney, 11 tons 772 pounds alfalfa hay, at \$10	117 70	
	L. N. Billings, 5 tons 510 pounds alfalfa hay, at \$10	55 10	
	Mrs. Yule, rent of lot	40 00	
	Geo. Muddox, account exhibit	15 00	
	Indian exhibition	275 00	
	Sundry monthly bills	50 10	
Oct. 2—	C. H. Holmes, engraving	12 00	
	Pacific Electric Works, electric bells	32 50	
	J. H. Campbell, excavator	75 00	
	E. L. Smith, badges	20 00	
4—	W. J. O'Brien, lime, etc.	40 00	
	Amount carried forward	\$799 90	\$29,338 98

		Amount brought forward	\$799 90	\$29,338 98
Oct.	4—	Wm. McLaughlin, freight and cartage.....	138 15	
		W. H. Murray, extra papers.....	50 00	
		J. A. M. Martin, merchandise.....	41 75	
		J. A. Lafferty, cartage.....	60 00	
		C. H. Krebs & Co., repairs, etc.....	164 80	
		J. F. Hill, annual blacksmith account.....	129 43	
		Grangers Business Association, annual grocery account ..	181 72	
		Goodwin Bros., account of library.....	28 30	
		Wm. Caswell, bill posting.....	113 57	
		Sacramento Glass and Crockery Co., filter.....	13 00	
		R. A. Steinegger, mounting.....	60 00	
		Pioneer Box Factory, sawdust.....	3 00	
		Whittier, Fuller & Co., repairs.....	39 65	
		A. S. Hopkins & Bro., merchandise.....	63 05	
		S. J. Jackson, repairs.....	9 00	
		Kirk, Geary & Co., drugs for team.....	6 00	
		E. Lyon & Co., merchandise.....	14 16	
		Locke & Lavenson, merchandise.....	53 36	
		J. M. Morrison, merchandise.....	2 30	
		J. A. McCormack, bill posting.....	7 50	
		C. McCreary & Co., merchandise.....	48 90	
		C. A. Sawtelle, use of cases.....	6 50	
		Stober Bros., repairs.....	7 00	
		Telephone Co., three months.....	17 55	
		J. Winterburn & Co., electros.....	9 75	
		F. Wickwire, merchandise.....	36 25	
		J. W. Wilson, horse hire.....	110 00	
		C. E. Adams, hay for team.....	13 65	
		H. S. Crocker & Co., San Francisco, merchandise.....	47 50	
		H. S. Crocker & Co., Sacramento, merchandise.....	5 65	
		I. De Turk, merchandise.....	32 00	
		M. M. Estee, merchandise.....	68 00	
		F. & T. Lumber Co., lumber.....	34 28	
		Gattman & Wilson, merchandise.....	111 78	
		R. E. Gogings, merchandise.....	4 50	
		Capital Gas Company, fuel.....	216 00	
		Capital Gas Company, electric light, etc.....	735 00	
		Capital Gas Company, gas.....	498 30	
		Geo. Murray & Son, repairs.....	14 00	
	12—	Smith & Muir, annual account park plumbing.....	195 63	
		Smith & Muir, annual account pavilion plumbing.....	312 11	
	26—	Western Union Telegraph Co., telegraphing account.....	17 60	
		L. A. McLean, veterinary services.....	12 00	
		Sundries for the month.....	176 35	
Nov.	2—	F. Foster & Co., binding.....	30 00	
	19—	Hay for team.....	31 90	
	30—	Sundries for month.....	24 40	
Dec.	3—	Dan. Foley, labor.....	9 00	
		Miss Hinkson, filling diplomas.....	32 75	
	17—	H. Haedrick, plowing field.....	17 00	
	29—	Union Ice Company, ice for season.....	55 35	
		J. Cunningham, Machinery Department.....	48 60	
	31—	H. Haedrick, hay for team.....	32 30	
		Sundries for month.....	28 20	
		H. Haedrick, plowing field.....	99 00	
Jan.	7—	Subscription turf journals, etc.....	25 00	
	10—	J. McAdams, hay.....	15 50	
	12—	Heilbron Bros., merchandise.....	9 40	
	31—	Sundries for month.....	19 70	
				\$5,187 04

Premiums.

1888.				
Feb.	1—	Root, Neilson & Co., account 1887.....	\$20 00	
		Mrs. Taylor, account 1887.....	8 00	
Sept.	15—	Ladies' Tournament.....	300 00	
		First Department—Horses, mules, and jacks.....	2,416 25	
		First Department—Cattle.....	2,041 32	
		First Department—Sheep and goats.....	613 12	
		First Department—Swine.....	408 75	
		First Department—Poultry.....	205 00	
		Second Department—Machinery and agricultural imple- ments.....	748 00	
		Third Department—Textile fabrics.....	530 00	
Amount carried forward			\$7,290 44	\$84,526 02

	Amount brought forward	\$7,290 44	\$34,526 02
Sept. 15—	Fourth Department—Mechanical products	524 00	
	Fifth Department—Agricultural products	723 00	
	Sixth Department—Horticultural products	989 50	
	Seventh Department—Fine Arts	1,138 00	
	Eighth Department—County exhibits	2,500 00	
	Ninth Department—Miscellaneous	127 00	
	Medals, silverware, etc.	965 04	

14,256 98

Races—1888.

Race No. 1—Stakes	1,120 00
Race No. 2—Purse	1,200 00
Race No. 3—Purse	300 00
Race No. 4—Stakes and added money	510 00
Race No. 5—Stakes and added money	525 00
Race No. 6—Stakes and added money	850 00
Race No. 7—Purse	250 00
Race No. 8—Stakes and added money	730 00
Race No. 9—Stakes and added money	3,600 00
Race No. 10—Purse	1,000 00
Race No. 11—Stakes and added money	1,020 00
Race No. 12—Stakes and added money	1,000 00
Race No. 13—Stakes and added money	1,190 00
Race No. 14—Purse	300 00
Race No. 15—Stakes and added money	1,375 00
Race No. 16—Purse	1,080 00
Race No. 17—Purse	1,000 00
Race No. 18—Stakes and added money	365 00
Race No. 19—Stakes and added money	750 00
Race No. 20—Stakes and added money	630 00
Race No. 21—Purse	300 00
Race No. 22—Purse	1,000 00
Race No. 23—Stakes	650 00
Race No. 24—Purse	800 00
Race No. 25—Stakes and added money	880 00
Race No. 26—Stakes and added money	890 00
Race No. 27—Stakes and added money	605 00
Race No. 28—Stakes and added money	840 00
Race No. 29—Purse	250 00
Special	250 00

\$25,560 00

Entrances Due.

Sept. 15—	Race No. 3—A. Tietjens, on "Ontario"	\$60 00
	Race No. 7—A. Wakeman, on "Etta W."	25 00
	Race No. 14—A. Wakeman, on "Etta W."	30 00
	Race No. 29—A. Wakeman, on "Etta W."	25 00
	Race No. 21—T. Bally, on "Little Phil"	30 00
	Race No. 29—L. A. Blasingame, on "Hermes"	25 00
	Race No. 14—B. P. Hill, on "Gladstone"	30 00
	Race No. 14—B. P. Hill, on "Adam"	30 00
	Race No. 21—B. P. Hill, on "Mikado"	30 00
	Race No. 21—B. P. Hill, on "Adam"	30 00
	Race No. 14—Robert Munroe, on "Pickpocket"	30 00
	Race No. 21—Robert Munroe, on "Pickpocket"	30 00
	Race No. 21—John Clark, on "Spray"	30 00

405 00

Salaries.

Edwin F. Smith, Secretary	\$2,400 00
James Muir, Janitor	900 00
Hiram Clock, Watchman	600 00
A. J. Hopper, Assistant Secretary	300 00
Trackman	587 60

\$4,787 60

Bills Payable.

D. O. Mills & Co.—Balance on note of 1884	\$4,500 00
---	------------

\$4,500 00

Insurance.

Sundry agencies, insurance on Pavilion	\$1,000 00
Sundry agencies, insurance on grand stands	375 05
Sundry agencies, insurance on office, etc.	80 00

\$1,455 05

Amount carried forward \$85,490 65

Amount brought forward \$85,490 65

Interest.

D. O. Mills & Co., account old note and current account.	\$693 44	
California State Bank, account land purchase	356 67	
		\$1,050 11

Advertising.

Mar. 15—Spirit of the Times	\$30 00	
Oct. 2—Spirit of the Times	200 00	
Chronicle	200 75	
Call Publishing Company	140 60	
Daily Examiner	133 82	
Alta Publishing Company	79 40	
Bulletin	95 40	
Post Publishing Company	50 00	
Daily Report	50 00	
Rural Press	50 00	
Breeder and Sportsman	242 00	
Record-Union	206 00	
Bee	107 00	
Nevada Transcript	15 00	
California Patron	45 00	
The Argonaut	30 00	
News Letter	25 00	
Tribune Publishing Company	35 00	
Grass Valley Tidings	15 00	
Stockton Independent	15 00	
Stockton Mail	15 00	
Los Angeles Times-Mirror	15 75	
Daily Appeal	14 00	
Woodland Mail	10 00	
Woodland Democrat	12 00	
Colusa Democrat	12 00	
Chronicle-Record, Chico	10 00	
Oct. 4—Fresno Expositor	10 00	
Chico Enterprise	10 00	
Placer Republican	8 00	
Grass Valley Union	8 00	
Amador Dispatch	6 00	
Sutter Farmer	6 00	
Dixon Tribune	6 00	
Merced Express	6 00	
Galt Gazette	6 00	
Willows Journal	6 00	
Red Bluff Sentinel	12 00	
Placerville Observer	6 00	
Placer Argus	7 50	
Peoples' Cause	8 00	
Tulare Times	7 00	
Oroville Register	5 00	
Benicia Era	2 50	
		\$1,973 72

Occident Stakes.

For 1888—Account collections made 1886 and 1887	\$885 00	
For 1889—Account death of entries	35 00	
		\$920 00

Running Stakes.

California Annual 1888, account declarations of 1887	\$10 00	
California Derby 1888, account declarations of 1887	80 00	
		\$90 00

Bills Receivable.

From Sacramento Waterworks, money advanced to purchase pipe		\$201 66
---	--	----------

D. O. Mills & Co.

Payment of overdraft of 1887		\$2,148 43
------------------------------------	--	------------

Park and Pavilion Receipts.

Rebate account life memberships		\$25 00
---------------------------------------	--	---------

1889.		
Jan. 31—Cash balance		\$901 31
		\$92,800 88

PARK AND PAVILION DAILY RECEIPTS.

1888.		Park.	Pavilion.
Sept.	3—Ticket sales .....	.....	\$1,151 00
	4—Ticket sales .....	.....	1,124 25
	5—Ticket sales .....	.....	1,243 50
	6—Ticket sales	\$2,149 50	1,281 00
	7—Ticket sales	1,307 25	875 25
	8—Ticket sales	1,428 00	782 25
	10—Ticket sales	2,161 00	871 75
	11—Ticket sales	1,051 00	631 50
	12—Ticket sales	1,342 00	1,826 50
	13—Ticket sales	1,948 50	1,002 00
	14—Ticket sales	1,740 50	868 75
	15—Ticket sales	232 00	751 75
	Entry clerk certificates	275 00	250 00
	Privileges, programmes, etc.	8,056 45	906 00
	Office collections, account life memberships, sweepstakes, seats, and art catalogues	702 00	434 30
Totals		<u>\$22,393 20</u>	<u>\$13,999 80</u>

PROFIT AND LOSS ACCOUNT.

Dr.

Balance February 1, 1888	\$5,968 28	
Building and improvements (net)	18,642 42	
Advertising	1,973 72	
Races	8,840 00	
Insurance	1,455 05	
Interest	1,050 11	
Park and Pavilion receipts, rebate	25 00	
Premiums	14,256 98	
Salaries	4,787 60	
Expense	15,435 44	
		<u>\$72,434 60</u>

Cr.

Rent	\$3,950 00	
Park and Pavilion receipts, Fair weeks	36,393 00	
State warrant and donated premiums	17,570 00	
Expense account, rebate	184 63	
Liabilities February 1, 1889	14,336 97	
		<u>\$72,434 60</u>

ANNUAL MEETING.

The Board of Directors of the State Agricultural Society held their annual meeting at the Secretary's office on Friday, January 25, 1889. Present—Directors Green, Carr, Shafter, Hancock, Cox, Swan, Perkins, Singletary, La Rue, Chase, and President Shippee.

The meeting was called to order by President Shippee.

The minutes of previous meeting were read and approved.

Mr. C. F. Swan, of Los Alamos, Santa Barbara County, who was appointed to fill the vacancy occasioned by the resignation of Mr. L. J. Rose, presented his commission and took his seat.

REPORTS OF COMMITTEES.

The Park Committee made the following report:

MR. PRESIDENT: Your committee to whom was referred the leasing of Agricultural Park buildings for a term of one, two, or three years, beg leave to report that they duly advertised and invited bids through the public press, for a period of two weeks, the same to be received at this office at twelve o'clock M., November 20, 1888.

On said date, at the hour named, your committee met and received the bids; the pasture field being reserved the first year.

The following bids were presented:

From Robert Allen—\$3,000 per year for the first year, and \$3,600 for the two years following.

From Willard Gardner—\$3,540 for the first year, and \$4,152 for the second year.

Mr. Gardner's bid being the better one, the Secretary was directed to draw up a lease to him for two years, beginning December 1, 1888, and ending December 1, 1890, to have sureties sign, and acceptance thereof by this committee. We herewith submit said lease, duly signed and approved, and ask the Board to ratify our action.

(Signed)

G. W. HANCOCK, Chairman.

Upon motion, the report was received and the action of the committee approved.

The same committee submitted a report of their action relating to the disposal of the stable manure:

MR. PRESIDENT: Your committee beg leave to report that they have leased to Jacob Olsen, for a period of four years from February 1, 1888, the privilege of all the stable manure accumulating on the Park grounds during said term; he to remove the same from time to time, as directed, and to keep the grounds clear of it; the price paid to be \$250 per year, in advance.

Proposals were invited by advertisement in daily papers, and two bids were received; one from C. H. Todd for \$240 per year, and the one accepted. We herewith submit the lease for approval by this Board.

(Signed)

G. W. HANCOCK, Chairman.

Upon motion, the report was received, and the action of the committee approved.

The annual report of the Board to the Governor of the State, and the Secretary's financial statement for the fiscal year ending January 31, 1888, were then read, adopted, and ordered to print.

A communication was received from the State Board of Trade, asking the appointment of a committee from this Board to meet with them for consultation, with reference to the holding of a State Citrus Fair, to be con-

ducted by the State Board of Agriculture, and to provide ways and means therefor. Upon motion, the President, Messrs. Green, Chase, Shafter, and the Secretary were named as such committee.

After the consideration of other matters of minor importance relating to the business of 1888, the Board proceeded to organize for 1889.

ELECTION OF OFFICERS.

The Board of 1889 is composed of the same members, Messrs. Green, Carr, and Shafter having been reappointed to succeed themselves.

The election of President being the first order of business, Director Shafter named Hon. Christopher Green, of Sacramento, for that position, saying it had been quite a number of years since this position had fallen to the lot of a member residing in Sacramento. He referred to the many years of service given the society by Mr. Green, as Director, also to the sterling qualities possessed by the gentleman for this position. He bespoke a bright future for the society under Mr. Green's guidance should he be selected.

There being no other nominations made, the Secretary was directed to cast the ballot for the Hon. Christopher Green for President, as the unanimous choice of the Board.

Hon. L. U. Shippee, the retiring President, in presenting his successor, thanked the Board for the honor they had conferred upon him by election for two successive terms, assuring them he would be found in the future as in the past, working for the interest of all concerned. He then introduced President Green, who, in assuming the chair, thanked the Board for the courtesy extended, remarking that it was the happiest moment of his life, his aspirations were fulfilled, and he hoped to receive the assistance of the entire Board in his endeavors to bring about a successful result.

Upon motion, H. M. La Rue was reelected Superintendent of Pavilion, and G. W. Hancock Superintendent of Park.

The usual trotting stakes for two, three, and four-year olds were ordered to be opened, and close March fifteenth, with the Secretary.

The Chair named as a Committee on Speed Programme Messrs. Chase, Shippee, Hancock, La Rue, and Swan.

Upon motion, the President was added.

President Green named the following members on standing committees:

FINANCE—Messrs. Cox, Shippee, La Rue, Chase, and Mr. President.

PRINTING AND PUBLICATION—Messrs. Boggs, Singletary, Shafter, Mr. President, and Secretary.

ON LIBRARY—Messrs. La Rue, Perkins, Carr, Hancock, and Secretary.

After the consideration of other business relating to the Fair of 1889, the Board adjourned to meet Wednesday, March 20, 1889.

EXHIBITS AT THE FAIR—1888.

FIRST DEPARTMENT.

Color.	Name.	Sire.	Dam.	Owner.	Residence.
CLASS I—THOROUGHBRED HORSES.					
<i>Stallions—Four years old and over.</i>					
Bay.....	Midlothian.....	Strathconan.....	Lifra.....	John Mackey.....	Sacramento.....
Bay.....	Three Cheers.....	Hurrah (imp.).....	Young Fashion.....	Thos. G. Jones.....	Santa Rosa.....
<i>Stallions—Two years old.</i>					
Bay.....	Robinhood.....	Flood.....	Robin Girl.....	W. M. Murry.....	Sacramento.....
Bay.....	N Y M.....	Shannon.....	Demirep.....	W. M. Murry.....	Sacramento.....
Chestnut.....	Friday (imp.).....	Robinson Crusoe.....	Beatrice.....	J. K. Newton.....	San Francisco.....
Dark ch'nut.....	Fergus 2d.....	Fergus 1st.....	Romping Girl.....	J. K. Newton.....	San Francisco.....
Bay.....	Silver Mine.....	Fergus 1st.....	Alsace.....	J. K. Newton.....	San Francisco.....
Chestnut.....	White Stockings.....	Somnus.....	Maid of the Hills.....	J. K. Newton.....	San Francisco.....
Sorrel.....	Joe Hoge.....	Joe Hooker.....	Viola R.....	Thos. G. Jones.....	Santa Rosa.....
<i>Stallions—One year old.</i>					
Bay.....	Herzog.....	Norfolk.....	Irene Harding.....	W. M. Murry.....	Sacramento.....
Sorrel.....	Kingsborough, Jr.....	Joe Hooker.....	By Foster.....	W. M. Murry.....	Sacramento.....
Bay.....	Fellowclarm.....	Kingsborough.....	Fleetwing.....	J. K. Newton.....	San Francisco.....
Bay.....	Major Ban.....	Longfellow.....	Trinket.....	L. U. Shippee.....	Stockton.....
Chestnut.....	Mares—Four years old and over, with Cull.	King Ban.....	Hearsay.....	L. U. Shippee.....	Stockton.....
Chestnut.....	Lily H.....	Newry.....	Lizzie Hartley.....	Frank Lowell.....	Sacramento.....
Sorrel.....	Lady Stacy.....	Wildile.....	Emma Barnes.....	Alice M. Cutler.....	Sacramento.....
<i>Mares—Two years old.</i>					
Chestnut.....	Agnes B.....	Glengarry (imp.).....	Easue.....	L. U. Shippee.....	Stockton.....
<i>Mares—One year old.</i>					
Chestnut.....	Whisper.....	King Ban (imp.).....	Whisperine.....	L. U. Shippee.....	Stockton.....
Chestnut.....	Falsara.....	Falsetto.....	Salara (imp.).....	L. U. Shippee.....	Stockton.....

FIRST DEPARTMENT—Continued.

Color.	Name.	Sire.	Dam.	Owner.	Residence.
	FAMILIES.				
	<i>Stallions—Other than thoroughbred, with not less than five of his Colts.</i>				
Brown	Privateer	Buccaneer	Lady Narley	Henry Klemp	Pleasant Grove.
	Alfi	Privateer		Henry Klemp	Pleasant Grove.
	Sunrise	Privateer		Henry Klemp	Pleasant Grove.
	Privateer, Jr.	Privateer		Henry Klemp	Pleasant Grove.
	Cleveland	Privateer		Henry Klemp	Pleasant Grove.
	Frances	Privateer		Henry Klemp	Pleasant Grove.
Bay	Mt. Vernon	Nutwood	By Chieftain	J. A. McCloud	Stockton.
	Kitty Vernon	Mt. Vernon		J. A. McCloud	Stockton.
	Grace Vernon			J. A. McCloud	Stockton.
	Miss Vernon			J. A. McCloud	Stockton.
	Johnny Vernon			J. A. McCloud	Stockton.
	Billy Vernon			J. A. McCloud	Stockton.
Gray	Buccaneer, Jr.	Buccaneer	Rebecca	A. D. Miller	Walsh Station.
	Jeannette	Buccaneer, Jr.		A. D. Miller	Walsh Station.
	Gold Drop			A. D. Miller	Walsh Station.
	Sister			A. D. Miller	Walsh Station.
	Garland			A. D. Miller	Walsh Station.
	Harry Thorpe			A. D. Miller	Walsh Station.
	<i>Dams—Other than thoroughbred, with not less than two of her Colts.</i>				
Bay	Lady Nutwood	Nutwood	By American Boy	Ed. Topham	Milpitas.
	Colts, Nutgrove and Sylvia			Ed. Topham	Milpitas.
Bay	Daisy	Tecumseh	Lancet	C. Heisen	Sacramento.
	Colts, Prince and Champion			C. Heisen	Sacramento.
Bay	Fannie	Dave Hill	Nellie	A. D. Oakley	Sacramento.
	Colts, Narda and Nellie			A. D. Oakley	Sacramento.
Brown	Lucy	Hiram Moore	Copperbottom mare.	Mrs. W. C. Stahl	Pleasant Grove.
	Colts, Sunrise and Frances			Mrs. W. C. Stahl	Pleasant Grove.
Gray	Lucy Gray	Sen. Booth	By John Rogers	A. D. Miller	Walsh Station.
	Colts, Luella and Nellie			A. D. Miller	Walsh Station.
Bay	Sallie Trix	Patchen Vernon	Katie Trix	Ira Pierce	San Francisco.
	Colts, Trix and Membrino Trix			Ira Pierce	San Francisco.
Bay	Jule and six colts	Glancer (imp.)	Brown Bess	J. Roberts	Irvington.

FIRST DEPARTMENT—Continued.

Color.	Name.	Sire.	Dam.	Owner.	Residence.
Chestnut. Bay.	Trix Sweetwood.	Whipple's Hambletonian Nutwood.	Sallie Trix Lady Loud.	Ira Pierce. B. E. Harris.	San Francisco. San Francisco.
Black. Brown Bay. Bay. Chestnut.	Araby Anna Almont. Ameriqueto. Amber Kitty Vernon.	Berlin Tilton Almont Eros Monroe Chief Mt. Vernon.	Arabia Madam Nelson By Chieftain By Admiral By Chieftain.	W. F. Smith J. P. Callendin F. H. Burke Geo. Buckman Geo. M. French.	Sacramento. Sacramento. Menlo Park. Sacramento. Stockton.
Bay. Chestnut. Bay. Brown	Sylvia. Lady Grey Falletta Lorena.	Grosvenor Guy Wilkes Falls Jim Mulveney.	Lady Nutwood. Zephyr. Mabel Echo Elmorine.	Ed. Topham Geo. W. Hancock W. F. Smith B. E. Harris.	Milpitas. Sacramento. Sacramento. San Francisco.
Brown	Albina De Mer.	Stamboul.	Belle Blanche.	W. F. Smith.	Sacramento.
CLASS III—ROADSTERS.					
Stallions—Four years old and over.					
Black. Brown Bay. Bay. Bay. Chestnut. Bay. Iron gray Black. Steel gray Bay. Bay. Light gray.	Monarch Captain Ben T. Ralph T. Harry Z. George Wapple George S. Evans Barbaro. Black Moor Buccaneer, Jr. Little Boy Corsair Elmo, Jr.	Monarch, Jr. Tom Boyd Singleton Buccaneer Alex Button Brigadier Mohawk Chief Len Rose The Moor. Buccaneer General Butler Privateer Elmo.	Myrtle Unknown Nellie Nellie Lady Lightfoot Lulu By Toronto Barbara Nellie Fuller Rebecca Patchen mare Lady Lightfoot. By Belmont.	I. N. Moddison M. Chisholm B. F. True B. F. True Dan. Kirkpatrick C. Sherman Levi Carter C. A. Owen. W. Oler. A. D. Miller L. E. Clawson T. C. Snider R. Seale.	Washington. Madison. Sacramento. Sacramento. Anderson. Susanville. Ceres. Fresno. Sacramento. Walsh Station. San Francisco. Washington. Cottonwood.
Black. Bay.	Peerless. Almont.	Killarney Marshal Almont.	By Missouri Chief Nellie.	Hugh Casey G. H. Pierce.	Sacramento. San Francisco.
Stallions—Three years old.					

Bay	Aleck	<i>Stallions—Two years old.</i>	Alex Button	Dutchy	J. H. Martin	Woodland.
Bay	Privateer, Jr.		Privateer	Bellfounder mare	Henry Klemp	
Bay	Cleveland		Privateer	Hambletonian mare	J. D. Tappins	Pleasant Grove.
Black	Berlin Prince		Berlin	Gold Dust	W. F. Smith	Nicolaus.
Brown	Sunrise		Privateer	Lucy	Mrs. W. C. Stahl	Pleasant Grove.
Sorrel	Colonel		Adonis	Eureka	N. Yost	Sacramento.
Golden Bay	Gold Drop		Buccaneer, Jr.	Clay mare	A. D. Miller	Walsh Station.
Bay	Young Rysdyks		Hambletonian King		James McNasser	Sacramento.
		<i>Stallions—One year old.</i>				
Brown	Nibs		Privateer	Bazaar mare	Henry Klemp	Pleasant Grove.
Brown	Albert		Privateer	Vibrator mare	R. B. Hall	Pleasant Grove.
Bay	Morgan		Adonis	Jule	N. Yost	Sacramento.
Brown	Bookkeeper		Caliph		L. Whitmore	Woodland.
		<i>Stallions—Suckling Cols.</i>				
Bay	Easter Wilkes		Gus Wilkes	Zephyr	G. W. Hancock	Sacramento.
Gray	Harry Thorpe		Buccaneer, Jr.	Buttercup	A. D. Miller	Walsh Station.
		<i>Geldings.</i>				
Bay	Bashaw		Charley Bashaw	By Gray Messenger	Dr. G. M. Dixon	Sacramento.
Gray	Haywood		Pascora Haywood	By Dave Hill, Jr.	McHugh & Malony	Fresno.
Bay	January		Tom Benton		O. C. McCracken	Berkeley.
Gray	Johnny Skelton		Milton Medium		J. R. Hodson	Sacramento.
Black	E. C. Pert		Tilton Almont	By Dave Hill	W. M. Billups	Colusa.
Black	Hollywood		Privateer	Leinster mare	Miss Nellie Ryan	Sacramento.
Brown	Coal Oil Tommy		Longfield	By General Reno	Henry Klemp	Pleasant Grove.
Chestnut	John		George M. Patchen, Jr.	By Nutwood	Dr. A. M. McCollum	Sacramento.
Gray	Ben		Echo, Jr.	By Berlin	A. D. Oakley	Sacramento.
Bay	Billy Bell		Alex Button	By Eagle	W. Oher	Sacramento.
Bay	Ben R.		Flying Cloud	By Eagle	B. F. Ready	Woodland.
Black	Nicodemus		Gray Eagle	Messenger mare	C. A. Young	Sacramento.
Dapple gray	Victor Eagle		Alex Button	By Black Ralph	J. J. McGrath	Marysville.
Brown	Tom Ryder		Black Eagle	Black Hawk mare	R. H. Newton	Woodland.
Black	Rob Roy		Rustic	By S. Stockridge Chief	J. Roberts	Sacramento.
Gray	Viking				P. J. Shafter	Olema.
		<i>Mares—Four years old and over.</i>				
Pay	Neta		Echo	Lady Gay	F. L. Williams	Sacramento.
Pay	Jennie		By Bellfounder	St. Clair mare	J. L. Aldrich	Courtland.
Black	Maggie		Don		M. Chisholm	Madison.
Pay	Emma Temple		Jackson Temple	By Emigrant	H. H. Helman	Visalia.
Chestnut	Crescent		Prompter	Starlight	Dr. C. E. Pinkham	Sacramento.

FIRST DEPARTMENT—Continued.

Color.	Name.	Sire.	Dam.	Owner.	Residence.
Chestnut ..	Narda ..	Prompter ..	Fannie ..	A. D. Oakley ..	Sacramento.
Gray ..	Lady Alice ..	Nutwood ..	By State of Maine ..	F. H. Burke ..	Menlo Park.
Gray ..	Pet ..	..	..	W. H. Bradley ..	Sacramento.
Brown ..	Nellie Bly ..	..	..	W. H. Bradley ..	Sacramento.
Brown ..	Pearless ..	Eallis ..	Jeanne Perault ..	B. E. Harris ..	San Francisco.
Bay ..	Bell ..	Black Hawk horse ..	..	L. Whitmore ..	Woodland.
Brown ..	Jule ..	Pedro ..	By Norfolk ..	L. Whitmore ..	Woodland.
<i>Mares—Three years old.</i>					
Sorrel ..	Laxie ..	..	Queen ..	M. Chisholm ..	Madison.
Bay ..	Mary Frances ..	Killarney ..	By Fred Low ..	P. Chatterton ..	Sacramento.
Black ..	Nellie ..	Berlin ..	Fannie ..	A. D. Oakley ..	Sacramento.
Iron gray ..	Grace Vernon ..	Mt. Vernon ..	..	J. A. McCloud ..	Stockton.
Bay ..	H B L ..	Miller's Hambletonian ..	By Sherman Morgan ..	A. D. Miller ..	Walsh Station.
Bay ..	Cora M ..	Gold Nut ..	John Nelson mare ..	W. J. O'Brien ..	Sacramento.
<i>Mares—Two years old.</i>					
Bay ..	Bonnie O ..	Prompter ..	Fannie ..	A. D. Oakley ..	Sacramento.
Chestnut ..	Miss Vernon ..	Mt. Vernon ..	..	J. A. McCloud ..	Stockton.
<i>Mares—One year old.</i>					
Bay ..	Frances ..	Privateer ..	Lucy ..	Mrs. W. C. Stahl ..	Pleasant Grove.
Brown ..	Adelia ..	Brilliant ..	Madame Buckner ..	T. C. Snider ..	Washington.
CLASS IV—CARRIAGE TEAMS.					
<i>Matched span of Carriage Horses—Owned and used as such by one person.</i>					
Black ..	Prince ..	Black Prince ..	..	Dr. A. Lepper ..	Sacramento.
Black ..	Colonel ..	Black Prince ..	..	Dr. A. Lepper ..	Sacramento.
Steel gray ..	Garland ..	Buccaneer ..	By Combination ..	E. M. Leitch ..	Sacramento.
Steel gray ..	Sister ..	Buccaneer ..	By General Taylor ..	E. M. Leitch ..	Sacramento.
Black ..	Rob Roy ..	Black Eagle ..	Black Hawk mare ..	J. Roberts ..	Sacramento.
Black ..	Kitty ..	Black Eagle ..	Black Hawk mare ..	J. Roberts ..	Sacramento.
Sorrel ..	Copper ..	..	..	A. B. McKae ..	Roseville.
Sorrel ..	Prince ..	..	..	A. B. McKae ..	Roseville.
Chestnut ..	Laura ..	Elmo ..	..	J. Garrity ..	San Francisco.
Chestnut ..	Rodge ..	Elmo ..	Garry ..	J. Garrity ..	San Francisco.

Gal. sorrel	Starlight	Tommy Benton	By Dave Hill, Jr.	James McNasser	Sacramento.
Gal. sorrel	Silver Clift	Jack Nelson	St. Clair mare	James McNasser	Sacramento.
CLASS V—ROADSTER TEAMS.					
<i>Double Team Roadsters—Owned and used as such by one person.</i>					
Bay	Orphan Boy	Tommy Benton	By Dave Hill, Jr.	S. K. Trefry	Sacramento.
Bay	Walter T	Jack Nelson	St. Clair mare	S. K. Trefry	Sacramento.
Iron gray	Harrison	Tommy Benton	By General McClellan	J. W. Wilson	Sacramento.
Iron gray	Morton	Tommy Benton	By McCracken's Blk Hk	J. L. McCord	Sacramento.
Sorrel	Anna E.	Tommy Benton	By Dave Hill, Jr.	J. L. McCord	Sacramento.
Sorrel	Mary Low	Tommy Benton		A. C. Tufts	Sacramento.
Sorrel	George	Privateer	Tecumseh mare.	A. C. Tufts	Sacramento.
Sorrel	Frank	Privateer	Tecumseh mare.	D. T. Wilson	Florin.
Black	Elmo	Privateer	Lady Merwin	D. T. Wilson	Florin.
Black	Pearl	Berlin	Lady Merwin	Wm. Coffee	Sacramento.
Iron gray	Nellie	Speculator	Thoroughbred mare	Wm. Coffee	Sacramento.
Iron gray	Mollie	Elmo	Whipple's Hambledonian	Dave Eisman	San Francisco.
Bay	Success	Nephew	By State of Maine	Dave Eisman	San Francisco.
Buckskin	May	Nephew	Gilroy Belle	R. C. Sargent	Lodi.
Brown	Lady Washington	Nephew		C. S. Clark	Sacramento.
Brown	George Washington			C. S. Clark	Sacramento.
Dun	Mollie	By Norfolk		J. G. Crutchen	Woodland.
Dun	Mage	By Norfolk		J. G. Crutchen	Woodland.
Cream	Koscoe	Venture	By Belmont	Ira Pierce	San Francisco.
Cream	Seymour	Billy Haywood	Decoration	Ira Pierce	San Francisco.
Chestnut	Vengeance	Mark		L. Whitmore	Woodland.
Chestnut	Setting Sun	Almont		L. Whitmore	Woodland.
Bay	Mark				
Bay	Honner				
CLASS VI—HORSES OF ALL WORK.					
<i>Stallions—Four years old and over.</i>					
Sorrel	General	French Canadian horse	Clyde mare	F. L. Williams	Sacramento.
Bay	Peacock	Fisher's Peacock	By French Messenger	George Hack	Freeport.
Bay	Canadian Prince	Gray Eagle	By Rifleman	G. W. Hancock	Sacramento.
Steel gray	Silver Leaf	Gray Eagle horse.	Maude	C. Heisen	Sacramento.
Dapple gray	Mage	George M. Patchen, Jr.	Daisy, by Signal	W. E. Constock	Pleasant Grove.
Chestnut	Clay Patchen	Norman Wonder	Rebecca	C. L. Kincaid	Davisville.
Gray	Selin	Prompter	By General McClellan	A. D. Oakley	Sacramento.
Steel gray	Eclipse	Crown Prince		A. D. Miller	Walsh Station.
Dapple gray	Prince of Marin			P. J. Shafter	Olema.

FIRST DEPARTMENT—Continued.

Color.	Name.	Sire.	Dam.	Owner.	Residence.
	<i>Stallions—Three years old.</i>				
Bay	Tom Cooper, Jr. Emperor	Tom Cooper. Peacock	By Torando. Hambletonian mare.	Theo. Skillman. D. R. Hunt.	Petaluma. Freeport.
	<i>Stallions—Two years old.</i>				
Brown	Hugh	Privateer	Vibrator mare.	R. B. Hall.	Pleasant Grove.
Black	Johnny Vernon	Mount Vernon	By son of Henry Clay	J. A. McCloud	Stockton.
Sorrel	Gleum	Miller's Hambletonian	By Combination	P. Russell.	Brighton.
Black	Young Prince.	Black Prince (imp.)	Moree.	James McNasser	Sacramento.
	<i>Stallions—One year old.</i>				
Sorrel	Seely.	Dave Hill	By Young Chieftain	Jos. Heintz.	Sacramento.
Bay	D G T.	Prompter	Nellie	D. G. Tilton	Nicolaus.
	<i>Stallions—Under one year.</i>				
Silver gray	Pat.	Gray Eagle	Sallie	John J. Gardner	Antelope.
Bay	Daylight	Prompter	Nellie	D. G. Tilton	Nicolaus.
Gray	Major	Gray Eagle	Queen	Jacob Heintz.	Sacramento.
	<i>Mares—Four years old and over, with Colt.</i>				
Iron gray	Susie Menford and colt	Messenger	By Signal	Robt. Gourlie	Freeport.
Bay	Pet and colt			H. H. Wilson	Nicolaus.
Sorrel	Mary and colt			H. H. Wilson	Nicolaus.
Bay	Nellie and colt	St. Clair	Duroc mare	D. G. Tilton	Nicolaus.
Brown	Lena Leinster and colt.	Leinster	By Nelson	W. E. Comstock	Pleasant Grove.
Sorrel	Nellie A and colt	Brick	Jennie Gibson	J. H. Allen	Sacramento.
Bay	Buttercup and colt.	Prompter	Puss, by Combination	A. D. Miller	Walsh Station.
	<i>Mares—Four years old.</i>				
Bay	Maudie	By Duroc horse	Nellie	D. G. Tilton	Nicolaus.
Gray	Lucy Gray	Combination	By John Rogers	A. D. Miller	Walsh Station.
Sorrel	Dolly Douglas	Jim Douglas	Coley	E. Comstock	Sacramento.
	<i>Mares—Three years old.</i>				
Sorrel	Daisy	Vibrator	Daisy	R. G. McKenzie	Nicolaus.
Steel gray	Luella	Miller's Hambletonian	Lucy Gray	A. D. Miller	Walsh Station.
Black	Jeannette	Buccaneer, Jr.	Puss	A. D. Miller	Walsh Station.

Bay.....	Sallie.....	<i>Mares—Two years old.</i>	Peacock.....	By Fred Low.....	Robt. Gourlie.....	Freeport.....
Black.....	Annie Laurie.....		Prompter.....	Pet.....	H. H. Wilson.....	Nicolaus.....
Bay.....	Jennie T.....		Prompter.....	Annie.....	D. G. Tilton.....	Nicolaus.....
Steel gray.....	Topsy.....	<i>Mares—One year old.</i>	Gray Eagle.....	Black Ralph mare.....	W. E. Comstock.....	Pleasant Grove.....
Steel gray.....	Nellie Henrich.....					
Dark bay.....	Nellie.....	<i>Mares—Suckling Colts.</i>	Buccaneer, Jr.....	By Norwood.....	Robt. Gourlie.....	Freeport.....
			Miller's Hambletonian.....	Lucy Gray.....	A. D. Miller.....	Walsh Station.....
Bay.....	Myrtle.....		Lord Derby.....	Pet.....	H. H. Wilson.....	Nicolaus.....
Sorrel.....	Marguerite.....		Little Jim.....	Mary.....	H. H. Wilson.....	Nicolaus.....
Brown.....	Maude.....		Gray Eagle.....	Lena Leinster.....	W. E. Comstock.....	Pleasant Grove.....
CLASS VII—DRAFT HORSES—NORMANS.						
<i>Stallions—Four years old and over.</i>						
Gray.....	Badel.....				L. E. McMahon & Son.....	Dixon.....
Black.....	Vivien.....				William Curtis.....	Sacramento.....
Black.....	<i>Stallions—Three years old.</i>		Cheri.....	Rosette.....	H. Wilsey.....	Petaluma.....
Black.....	<i>Stallions—Two years old.</i>					
Brown bay.....	Victor.....		Taupen.....	Bourotte.....	H. Wilsey.....	Petaluma.....
Gray.....	Durand.....		Topin.....	Mignonne.....	H. Wilsey.....	Petaluma.....
Brown.....	Prince.....		Pier.....	By Monarch.....	W. E. Proctor.....	Woodland.....
	Frank Pixley.....		Debonaire.....	Biche.....	F. B. Chandler.....	Elmira.....
<i>Stallions—One year old.</i>						
Gray.....	Shasta.....		Duke of Morris.....	Biche.....	F. B. Chandler.....	Elmira.....
Bay.....	Ko-Ko.....	<i>Stallions—Under one year.</i>	Dampier.....	Biche.....	F. B. Chandler.....	Elmira.....
Black.....	<i>Mares—Four years old and over, with Colt.</i>		St. Cloud.....	By Black Prince.....	F. B. Dodge.....	Binghamton.....
	<i>Mares—Four years old and over.</i>					
Sorrel.....	Biche.....				F. B. Chandler.....	Elmira.....

FIRST DEPARTMENT—Continued.

Color.	Name.	Sire.	Dam.	Owner.	Residence.
Gray	<i>Mares—Sucking Colts.</i> Magnolia	Duke of Morris	Maggie	F. B. Dodge	Binghamton.
	CLASS VIII—DRAFT HORSES—PERCHIERONS. <i>Stallions—Four years old and over.</i>				
Black	Hercule (imp.)	Brilliant	Rose	Theo. Skillman	Petaluma.
Black	Luneville	Ko-Ko	Soule	John Seaward	Wheatland.
	Solon			H. Wilsey	Petaluma.
	CLASS IX—DRAFT HORSES—CLYDESDALES. <i>Stallions—Four years old and over.</i>				
Bay	Marquis of Lorne	Marquis of Graham	Nancy	W. H. Blackford	Grand Island.
Black bay	Pride of Cree	The Mainsteg	Bell	C. H. Gemmill	Santa Rosa.
Bay	Duke	Ben Lomond (imp.)	Jule	James Roberts	Irvington.
	<i>Stallions—Two years old.</i>				
Bay	Lord McDuff, Jr.	Lord McDuff	Kit	H. Wilsey	Petaluma.
Bay	Prince	Ben Lomond (imp.)	Jule	James Roberts	Irvington.
Bay	Jubilee	Exchange (imp.)	Jule	James Roberts	Irvington.
	<i>Stallions—Under one year old.</i>				
Bay	Plunger	Exchange (imp.)	Jule	James Roberts	Irvington.
	<i>Mares—Four years old and over, with Colt.</i>				
Bay	Julia and colt	Glanceer (imp.)	Bess	James Roberts	Irvington.
	<i>Mares—Four years old and over.</i>				
Bay	Damsel	Ben Lomond (imp.)	Jule	James Roberts	Irvington.
	<i>Mares—Three years old.</i>				
Bay	Dolly	Ben Lomond (imp.)	Jule	James Roberts	Irvington.

CLASS X.—DRAFT HORSES—OTHER THAN NORMANS, PERCHERONS, OR CLYDES- DALES.					
<i>Stallions—Four years old and over.</i>					
Brown	Young Donald Dinnie	Donald Dinnie	Maggie	I. N. Moddison	Washington.
Brown	Earl of Derby	Lord Derby	Fannie	R. J. McKenzie	Nicolaus.
Gray	French Lion	Normandy (imp.)	By Wm. Wallace	Thomas Ross	Sacramento.
Bay brown.	Brown Prince			H. Wilsey	Petaluma.
Sorrel	Pioneer			Robert I. Orr	Hollister.
Gray	Wide Wake	Wide Wake, Sr.	Maid of France	Levi Carter	Ceres.
Gray	St. Lawrence	St. Lawrence	Nellie	R. J. Merkeley	Sacramento.
Gray	White King, Jr.	White King (imp.)	English mare (imp.)	P. M. Warn	Sacramento.
<i>Stallions—Three years old.</i>					
Sorrel	Salisbury			Robert I. Orr	Hollister.
Black	St. Cloud, Jr.	St. Cloud	May	W. E. Comstock	Pleasant Grove.
Black	Bonneville	Luneville	Nance	A. W. Oakley	Wheatland.
Black	Frank	Luneville	Belle	A. W. Oakley	Wheatland.
Gray	Vandee, Jr.	Vandee	Nellie	R. J. Merkeley	Sacramento.
<i>Stallions—Two years old.</i>					
Bay	Brilliant	Luneville	Magnolia	John Seaward	Wheatland.
Gray	Monarch	Dumas	Juanita	R. J. Merkeley	Sacramento.
Black	Victor	Dumas	Fanchon	R. J. Merkeley	Sacramento.
<i>Stallions—One year old.</i>					
Black	Prince	Silver Leaf	Daisy	C. Heisen	Sacramento.
Gray	Dumas, Jr.	Dumas	Nellie	R. J. Merkeley	Sacramento.
Gray	Johnny	St. Lawrence	Polly	R. J. Merkeley	Sacramento.
Bay	Bertem, Jr.	Bertem, Sr.	Polly	J. Grubbs	Oroville.
<i>Stallions—Under one year.</i>					
Sorrel	Champion	Silver Leaf	Daisy	C. Heisen	Sacramento.
Sorrel	Dan	By John Bull	Messenger mare	Robert Gourlie	Freeport.
<i>Mares—Four years old and over, with Colt.</i>					
Bay	Daisy and colt	Tecumseh Morgan	Lancett's Bellfounder	C. Heisen	Sacramento.
Black	Fanchon and colt	Normandy	Nellie	R. J. Merkeley	Sacramento.
<i>Mares—Four years old and over.</i>					
Bay	Daisy	Honest Tom	Fannie	H. H. Wilson	Nicolaus.
<i>Mares—Three years old.</i>					
Bay	Jennie	Honest Tom	Fannie	H. H. Wilson	Nicolaus.

FIRST DEPARTMENT—Continued.

Color.	Name.	Sire.	Dam.	Owner.	Residence.
Black	<i>Mares—Two years old.</i>				
	Queen	Hanson	Madame	H. H. Wilson	Nicolaus.
Black	<i>Mares—One year old.</i>				
	Nellie	Debonaire	Fanchon	R. J. Merkeley	Sacramento.
Brown	<i>Mares—Under one year.</i>				
Bay	Queen	Salvator	Fanchon	R. J. Merkeley	Sacramento.
	Helen	Salvator	Nellie Ist.	R. J. Merkeley	Sacramento.
	CLASS XI—SADDLE HORSES. <i>Horse, Mare, or Gelding.</i>				
Bay					
Black	Estella			R. C. Trefry	Sacramento.
	Do Do			W. H. Blackford	Grand Island.
Gray	Hancock			Felix Smith	Sacramento.
Bay	Scott			J. B. Haggin	Sacramento.
Brown	Allen	Smuggler, Jr.	Primrose	B. E. Harris	San Francisco.
Black	Bruce	Irwin Davis	By Belmont	B. E. Harris	San Francisco.
		Black Ralph	Sylph	B. E. Harris	San Francisco.
	CLASS XII—SWEETSTAKES. <i>Stallions.</i>				
C. bay	Royal Studley	Young Candidate	By Whalebone	Cook Stock Farm	Danville.
C. bay	Baron Hilton	Lucksall	By Sportsman	Cook Stock Farm	Danville.
C. bay	Nonpareil	Emperor	By Benefit	Cook Stock Farm	Danville.
Bay	Midlothian	Stratheonian	Lifra	John Mackey	Sacramento.
Black	<i>Mares.</i>				
	Victorine	Gibraltar	By Blackbird	W. F. Smith	Sacramento.
Chestnut	Trix	Whipple's Hambletonian	Sallie Trix	Ira Pierce	San Francisco.
Sorrel	Dolly Douglas	Jim Douglas	Coley	E. Comstock	Sacramento.
	CLASS XIII—JACKS, JENNIES, ETC. <i>Jacks—Four years old and over.</i>				
Black gray	Richard Fox			S. Parker	Rocklin.
Mouse	Beecher	Peacock	Black Warrior	H. W. Jeans	Blocksburg.

Black	Black Warrior	Madison	H. P. Merritt	Woodland.
	<i>Jacks—Two years old.</i>			
Black	Washington Eclipse, Jr.	Washington Eclipse	Levi Carter	Ceres.
	<i>Mules—Matched span, three years old and over, California bred.</i>			
Brown	Blaze	Samson	H. H. Wilson	Nicolaus.
Brown	Jeff	Samson	H. H. Wilson	Nicolaus.
Bay	Dollie	Samson	H. H. Wilson	Nicolaus.
Bay	Nellie	Samson	H. H. Wilson	Nicolaus.
	<i>Mules—Two years old.</i>			
Black	Lize	Jumbo	Henry Klemp	Pleasant Grove.
Bay	Mag	Jumbo	Henry Klemp	Pleasant Grove.
	<i>Mules—One year old.</i>			
Black	Nell	Jumbo	Henry Klemp	Pleasant Grove.
	SPECIAL CLASS—FOR CLEVELAND BAYS AND FRENCH COACH HORSES.			
	<i>Stallions—Four years old and over.</i>			
French Ch.	Vindicator		Theo. Skillman	Petaluma.
French Ch.	Gaulelet		Theo. Skillman	Petaluma.
Clevel'd Bay	Royal Studley (68)	Young Candidate	Cook Stock Farm	Danville.
Clevel'd Bay	Baron Hilton (584)	Lucksall	Cook Stock Farm	Danville.
Clevel'd Bay	Duke of York (72)	Paulenus	Cook Stock Farm	Danville.
Clevel'd Bay	Saxon Prince (83)	Sportsman	Cook Stock Farm	Danville.
Clevel'd Bay	Nonpareil (36)	Emperor	J. C. Storm	Salinas.
Bay	Gallian (imp.)	Imported	Theo. Skillman	Petaluma.
	<i>Stallions—Three years old.</i>			
Clevel'd Bay	Barrington	Prince of Cleveland	Cook Stock Farm	Danville.
Clevel'd Bay	General (249)	Salesman	Cook Stock Farm	Danville.
Clevel'd Bay	Bonanza (246)	General	By Field Marshal	Danville.

FIRST DEPARTMENT—Continued.

CATTLE.

Color.	Name.	Sire.	Dam.	Owner.	Residence.
CLASS I—DURHAMS.					
<i>Bulls—Three years old and over.</i>					
Red.	Mugwump	Kirklevington Carol	Belle Medico	Wilfred Page	Penn's Grove.
Red.	Oxford Duke 24 (53048)	Oxford Duke (53040)	Xylophia 5th	William Jacobs	Sacramento.
Red.	Counselor (73503)	Commissioner (34824)	Beauty 2d Maid	P. Peterson	Sites.
Red.	Josephus (70332)	3d Thorndale Duke (7080)	Sadie Mason 6th	R. J. Merkeley	Sacramento.
Red.	Kewah Duke	Henrietta's Duke (38754)	Miss Leslie 5th	R. J. Merkeley	Sacramento.
Red.	Kirklevington Oxford Count (36723)	Kirklev'ton Duke 2d (32890)	Wild Eyes Craggs 2d	P. S. Childs	Davisville.
Red.	3d Kirklevington of For. Home (63259)	Duke of Kirklev'ton (51123)	Oxford Rose 3d	Coleman Younger	San José.
Red.	5th Kirklevington of For. Home (63261)	Duke of Kirklev'ton (51123)	Jessie Maynard	Coleman Younger	San José.
<i>Bulls—Two years old.</i>					
Roan	Holdfast	Sonoma Chief	Lady Harriet	Wilfred Page	Penn's Grove.
Red	Protector	Cherry Prince (59128)	Mazourka Caroline	Wilfred Page	Penn's Grove.
Red	Rogue	Cherry Prince (59128)	Rhoda	Wilfred Page	Penn's Grove.
<i>Bulls—One year old.</i>					
Red and wh.	Belt	Cherry Prince (59128)	Belle Christmas	Wilfred Page	Penn's Grove.
Red and wh.	Sonberry	Sonoma 2d	Belle Strawberry	Wilfred Page	Penn's Grove.
Red	Blood	Catchpenny (59107)	Belle Wilfred	Wilfred Page	Penn's Grove.
Red and wh.	Cheeseit	Cherry Prince (59128)	Buttermilk	Wilfred Page	Penn's Grove.
Roan	Parson	Cherry Prince (59128)	Belle Kirk	Wilfred Page	Penn's Grove.
Roan	Princepts	Cherry Prince (59129)	Belle Princess	Wilfred Page	Penn's Grove.
Red	Sullivan (89617)	Counselor (73503)	2d Belle of Antelope (16460)	P. Peterson	Sites.
Red	Maylook (87996)	Counselor (73503)	5th Belle of Antelope (47992)	P. Peterson	Sites.
Red	Syoc (89642)	Counselor (73503)	Belle of Antelope (33954)	P. Peterson	Sites.
Red	Hermit Kirke	Hermit Duke	Hazel Kirke	P. H. Murphy	Brighton.
Red	Hermit Belle Duke	Hermit Duke	Linda Belle	P. H. Murphy	Brighton.
Red	Marandis Duke of Brighton	Hermit Duke	Marandi 14th	P. H. Murphy	Brighton.
Red	Marvelous	Beaumont 7th.	Kosa Belle 3d	P. H. Murphy	Brighton.
Red	Sir William	Josephus (70332)	Red Edith 2d	R. J. Merkeley	Sacramento.
Red	Boruck	Josephus (70332)	May Girl	R. J. Merkeley	Sacramento.
Red	26th Kirklevington of Forest Home	5th Kirklevington of F. H.	10th Rose of Forest Home.	C. Younger & Son	San José.
Red	Mazurka Duke			Bridgford & Muligan	Colusa.

Bulls—Calves.

Red	Gilt Edge	Royal Duke (61001)	Gold Dust	Wilfred Page	Penn's Grove.
Red and wh.	To-morrow	Royal Duke (61001)	Caroline Sutherland	Wilfred Page	Penn's Grove.
Red	Pickrell	Sonoma Chief	Caroline Pickrell	Wilfred Page	Penn's Grove.
Roan	Sharon Duke	5th Airdrie of Sharon	Dollie	Wm. Jacobs	Sacramento.
Red	Czar Duke	The Czar	Cynthia 2d	Wm. Jacobs	Sacramento.
Red		The Czar	Xylophia 8th	Wm. Jacobs	Sacramento.
Red and wh.		5th Airdrie of Sharon	Xylophia 6th	Wm. Jacobs	Sacramento.
Red	Chancellor	Counselor (73503)	Lillie Belle Geneva	Wm. Jacobs	Sacramento.
Red	Cavalier	Counselor (73503)	2d Belle of Antelope	P. Peterson	Sites.
Red	Mikado	Counselor (73503)	4th Belle of Antelope	P. Peterson	Sites.
Red	Ben Hur	Counselor (73503)	5th Belle of Antelope	P. Peterson	Sites.
Red	Grover C.	Counselor (73503)	Nettie P	P. Peterson	Sites.
Red	Robert I	Counselor (73503)	Alida P	P. Peterson	Sites.
Red	Uno	Counselor (73503)	Jennie McL	P. Peterson	Sites.
Red	Oliver Twist	Counselor (73503)	Red Mollie	P. Peterson	Sites.
Red	Shakespeare	Josephus (70332)	7th Belle of Antelope	P. Peterson	Sites.
Red	Don Juanaris	Josephus (70332)	Polly	R. J. Merkeley	Sacramento.
Red	Harrison	Josephus (70332)	Red Edith 2d	R. J. Merkeley	Sacramento.
Red	Sultan	Josephus (70332)	Helen 2d	R. J. Merkeley	Sacramento.
Red	Sheridan	Josephus (70332)	Ruby	R. J. Merkeley	Sacramento.
Red	Morton	Josephus (70332)	Maybell	R. J. Merkeley	Sacramento.
Red	Ben Hur	Josephus (70332)	Ruby 3d	R. J. Merkeley	Sacramento.
Red	Red Prince 2d	Duke of California	Red Edith 3d	R. J. Merkeley	Sacramento.
Red	Prince 3d	Duke of California	Daisy	P. S. Childs	Davisville.
Red	Ed Kirklevington of Forest Home	Duke of California	Nellie	P. S. Childs	Davisville.
Red		3d Kirklevington of F. H.	Jessie Maynard 3d	C. Younger & Son	San José.
<i>Cows—Three years old and over.</i>					
Red	Belle Medico	El Medico (59730)	Belle Napier	Wilfred Page	Penn's Grove.
Roan	Maita	Kirklevington Price (60216)	Madie	Wilfred Page	Penn's Grove.
Red	Henrietta Page	Sonoma (18336)	Rose of Sonoma	Wilfred Page	Penn's Grove.
Roan	Belle Strawberry	Cherry Prince (59128)	Rosabella	Wilfred Page	Penn's Grove.
Red	Lone Butterfly	Duke Butterfly (43345)	Happy Mary	Wm. Jacobs	Sacramento.
Roan	Oxford Myrtle 7th	29th Duke of Airdrie (32187)	Oxford Myrtle 4th	Wm. Jacobs	Sacramento.
Red	Xylophia 6th	Logan (39629)	Xylophia 5th	Wm. Jacobs	Sacramento.
Roan	Duchess of Durham	Viscount (54202)	Duchess of Durham 14th	Wm. Jacobs	Sacramento.
Red	Rosa Bella 2d	Marvel (12409)	Rosabella	Wm. Jacobs	Sacramento.
Red	Red Duchess of Cedar	7th Duke of Sharon (43528)	The Red Duchess	Wm. Jacobs	Sacramento.
Red	3d Belle of Antelope	3d Duke Manchester (47992)	3d Belle of Antelope	P. Peterson	Sites.
Red	4th Belle of Antelope	3d Duke Manchester (47992)	Belle of Antelope	P. Peterson	Sites.
Red	Mountain Maid	3d Duke Manchester (47992)	2d Belle of Antelope	P. Peterson	Sites.
Red	Rosely K	Hancock (43911)	2d Belle of Antelope	P. Peterson	Sites.
Red	Linda Belle	6th Red Thorndale	Marand 14th	P. H. Murphy	Brighton.

FIRST DEPARTMENT—Continued.

Color.	Name.	Sire.	Dam.	Owner.	Residence.
Red	Hazel Kirke.	6th Red Thorndale	Marandi 14th	P. H. Murphy	Brighton.
Red	Ellen Dale	6th Red Thorndale	Marandi 14th	P. H. Murphy	Brighton.
Red	Princess	Josephus	Marandi 14th	P. H. Murphy	Davisville.
Red	Belle 27th	Kirklev'ton Duke 2d (3289)	Belle 14th	P. S. Childs	Davisville.
Red	Hattie	R'n Duchess Oxford (11381)	Hattie James 4th	P. S. Childs	Davisville.
Red	Jessie Maynard 3d	Duke of Kirklev'ton (51123)	Jessie Maynard	C. Younger & Son.	San José.
Red	4th Belle of F. H.	Forest King (46079)	2d Belle of Avon Ranch.	C. Younger & Son.	San José.
Red	Manunga	El Medico (59930)	Marica	Bridgeford & Mul-ligan	Colusa.
Red	Lucy June	Airdrie Jackson (28418)	Lady Oxford	Bridgeford & Mul-ligan	Colusa.
<i>Cous—Two years old.</i>					
Roan	Christinas Eve	Cherry Prince.	Belle Christmas.	W. Page.	Penn's Grove.
Red and wh.	Enriqueta	Cherry Prince.	Henrietta Page	W. Page.	Penn's Grove.
Red	Belle of the Oaks	Sonoma Chief	Belle Medico	W. Page.	Penn's Grove.
Red and wh.	Lucy Richland	Baron Bright Eyes (37534)	Lucy Sims 2d	W. Jacobs.	Sacramento.
Red and wh.	Blossom	Baron Bright Eyes	Blossom of Richland	W. Jacobs.	Sacramento.
Red	Nettie P.	Hancock (43911)	5th Belle of Antelope	P. Peterson	Sites.
Red	Rosabella 8th.	Beaumont 7th	Rosabelle 4th.	P. H. Murphy	Brighton.
Red roan	Jessie Maynard 4th	Duke of Kirklevington.	Jessie Maynard	C. Younger & Son.	San José.
Red roan	Amelia 12th.	5th Kirklevington of F. H.	Amelia 10th.	C. Younger & Son.	San José.
<i>Cous—One year old.</i>					
Red and wh.	Goldnut	Sonoma Chief	Goldvein	Wilfred Page.	Penn's Grove.
Roan	Zuleika	Sonoma Chief	Zurka Princess	Wilfred Page.	Penn's Grove.
Roan	Ashburner Lass	Cherry Prince.	Lady Ashburner	Wilfred Page.	Penn's Grove.
Red	Lena 6th	Stucie Kirklevington.	Lena 2d	Wm. Jacobs	Sacramento.
Red	Rose 17th	Oxford Duke 2d	Rose 6th	Wm. Jacobs	Sacramento.
Red	Mattie Miller 38th.	Oxford Duke 2d	Mattie Miller 23d	Wm. Jacobs	Sacramento.
Red	Mattie Miller 39th.	Oxford Duke 2d	Mattie Miller 9th	Wm. Jacobs	Sacramento.
Red	Mattie Miller 40th	Oxford Duke 2d	Mattie Miller 6th	Wm. Jacobs	Sacramento.
Red	Patty	Counselor	5th Belle of Antelope	P. Peterson	Sites.
Red	2d Rosely K	Counselor	Rosely K	P. Peterson	Sites.
Red	Ruby B.	Rowena's Duke of Airdrie.	Leonora B	P. Peterson	Sites.
Red	True B.	Rowena's Duke of Airdrie	Allie B.	P. Peterson	Sites.
Red	Rose Jennie.	Gallareh Duke	Rose Emma	P. H. Murphy	Brighton.
Red	Lady Knox of M F	Baron of Airdrie	Lady Knox	P. H. Murphy	Brighton.
Red	Jane	Josephus.	Alice.	R. J. Merkeley	Sacramento.
Red	Lottie.	Josephus	Helen R	R. J. Merkeley	Sacramento.

Red and wh.	Violet.....	Josephus.....	Mary Girl.....	R. J. Merkeley.....	Sacramento.
Red roan.	Oxford Rose 11th.....	Duke of Kirklevington.....	Oxford Rose 3d.....	C. Younger & Son.....	San José.
White.....	Nevada Belle 8th.....	3d Kirklevington of F. H.....	Nevada Belle.....	C. Younger & Son.....	San José.
Red.....	Manunga 2d.....	Catchpenny.....	Manunga.....	Bridgeford & Mul- ligan.....	Colusa.
<i>Cows—Heifer Calves.</i>					
Roan.....	Manuela.....	Sonoma 2d.....	Maita.....	W. Page.....	Penn's Grove.
Red.....	Sweet Milk.....	Mugwump.....	Dairy Maid 4th.....	W. Page.....	Penn's Grove.
Red.....	Oxford Myrtle 8th.....	Double Gloster (imp.).....	Oxford Myrtle 7th.....	Wm. Jacobs.....	Sacramento.
Red.....	Lucy Barrington.....	2d Earl of Aberdeen.....	Mary Barrington.....	Wm. Jacobs.....	Sacramento.
Red.....	Della 3d.....	5th Airdrie of Sharon.....	Della.....	Wm. Jacobs.....	Sacramento.
Red.....	8th Belle of Antelope.....	Counselor.....	Belle of Antelope.....	P. Peterson.....	Sites.
Red.....	3d Rosely K.....	Counselor.....	Rosely K.....	P. Peterson.....	Sites.
Red.....	Edith 5th.....	Josephus.....	Alice.....	R. J. Merkeley.....	Sacramento.
Red.....	Carroll.....	Josephus.....	Edith Elkin.....	R. J. Merkeley.....	Sacramento.
Red.....	Natalie.....	Josephus.....	Ruby 2d.....	R. J. Merkeley.....	Sacramento.
Red.....	Lola.....	Josephus.....	Red Edith 4th.....	R. J. Merkeley.....	Sacramento.
Red.....	Girofla 2d.....	Josephus.....	Girofla.....	R. J. Merkeley.....	Sacramento.
Red.....	Fanchon.....	Josephus.....	Alice.....	R. J. Merkeley.....	Sacramento.
Red.....	Red Rose.....	Kirklevington Ox'd Count.....	Flora 16th.....	R. J. Merkeley.....	Sacramento.
Red.....	Gussie.....	Kirklevington Ox'd Count.....	Cora.....	P. S. Childs.....	Davisville.
Red.....	2nd Rose of Forest Home.....	5th Kirklevington of F. H.....	21st Rose of Forest Home.....	P. S. Childs.....	Davisville.
Red roan.....	Oxford Rose 12th.....	5th Kirklevington of F. H.....	Oxford Rose 6th.....	C. Younger & Son.....	San José.
Red roan.....	Manunga 3d.....	Counselor.....	Manunga.....	C. Younger & Son.....	San José.
<i>Sheepstakes—Bull of any age.</i>					
Red.....	Mugwump.....	Kirklevington Carol.....	Belle Medico.....	W. Page.....	Penn's Grove.
Red.....	Counselor.....	Commissioner.....	Beauty 2d Maid.....	P. Peterson.....	Sites.
Red.....	Kirklevington Oxford Count.....	Duke of Kirklevington 2d.....	Wild Eyes Craggs 2d.....	P. S. Childs.....	Davisville.
Red.....	2d Kirklevington of Forest Home.....	Duke of Kirklevington.....	Oxford Rose 3d.....	C. Younger & Son.....	San José.
Red.....	Mazurka Duke.....	Oxford Duke.....	Xylopia 5th.....	Bridgeford & Mul- ligan.....	Colusa.
Red.....	Oxford Duke 2d.....	Oxford Duke.....	Xylopia 5th.....	Wm. Jacobs.....	Sacramento.
<i>Sheepstakes—Cow of any age.</i>					
Roan.....	Maita.....	Kirklevington Prince.....	Madie.....	Wilfred Page.....	Penn's Grove.
Roan.....	Belle Strawberry.....	Cherry Prince.....	Rosa Belle.....	Wilfred Page.....	Penn's Grove.
Roan.....	Jessie Maynard 4th.....	Duke of Kirklevington.....	Jessie Maynard.....	C. Younger & Son.....	San José.
Red roan.....	Oxford Rose 11th.....	Duke of Kirklevington.....	Oxford Rose 3d.....	C. Younger & Son.....	San José.
Red roan.....	Manunga.....	Catchpenny.....	Manunga.....	Bridgeford & Mul- ligan.....	Colusa.
Red roan.....	Manunga 2d.....	Logan.....	Xylopia 5th.....	Bridgeford & Mul- ligan.....	Colusa.
Red roan.....	Xylopia 6th.....	Logan.....	Xylopia 5th.....	Wm. Jacobs.....	Sacramento.

FIRST DEPARTMENT—Continued.

Color.	Name.	Sire.	Dam.	Owner.	Residence.
Red roan.	Belle 27th	Kirklevington Duke 2d	Belle 15th	P. S. Childs	Davisville.
Red	Hattie	Roan Duchess Oxford	Hattie James 14th	P. S. Childs	Davisville.
	<i>Herd—Over two years old.</i>				
	Bull—Mugyump	Kirklevington Carol	Belle Medico	W. Page	Penn's Grove.
	Cows—Matla	Kirklevington Prince	Madie	W. Page	Penn's Grove.
	Belle Strawberry	Cherry Prince	Rosa Bella	W. Page	Penn's Grove.
	Belle Medico	El Medico	Belle Napier	W. Page	Penn's Grove.
	Henrietta Page	Sonoma	Rose of Sonoma	W. Page	Penn's Grove.
	Bull—Counselor	Commissioner	Beauty 2d Maid	P. Peterson	Sites.
	Cows—3d Belle of Antelope	3d Duke of Manchester	Belle of Antelope	P. Peterson	Sites.
	4th Belle of Antelope	3d Duke of Manchester	Belle of Antelope	P. Peterson	Sites.
	Mountain Maid	3d Duke of Manchester	2d Belle of Antelope.	P. Peterson	Sites.
	Rosely K.	Hancock	2d Belle of Antelope.	P. Peterson	Sites.
	Bull—Kirklevington Oxford Count.	Kirklevington Duke 2d	Wild Eyes Craggs	P. S. Childs	Davisville.
	Cows—Belle 27th	Kirklevington Duke 2d	Belle 14th	P. S. Childs	Davisville.
	Hattie	Roan Duchess Oxford	Hattie James 4th	P. S. Childs	Davisville.
	Flora 16th	Kirklevington Duke 2d	Flora 2d	P. S. Childs	Davisville.
	Burnetta 7th	Roan Duchess Oxford	Burnetta 2d	P. S. Childs	Davisville.
	Bull—3d Kirklevington of Forest Home	Duke of Kirklevington	Oxford Rose 3d	C. Younger & Son	San José.
	Cows—Jessie Maynard 3d	Duke of Kirklevington	Jessie Maynard	C. Younger & Son	San José.
	Jessie Maynard 4th	Duke of Kirklevington	Jessie Maynard	C. Younger & Son	San José.
	Amelia 12th	5th Kirklevington of F. H.	Amelia 11th	C. Younger & Son	San José.
	4th Belle of Forest Home	Forest King	2d Belle of Avon Ranch	C. Younger & Son	San José.
	Bull—Belt	Cherry Prince	Belle Christmas	W. Page	Penn's Grove.
	Cows—Zuleika	Sonoma Chief	Zurka Princess	W. Page	Penn's Grove.
	Goldnut	Sonoma Chief	Goldrein	W. Page	Penn's Grove.
	Ashburn Lass	Cherry Prince	Lady Ashburner	W. Page	Penn's Grove.
	Sweetmilk	Mugwump	Dairy Maid 4th	W. Page	Penn's Grove.
	Bull—Syoc	Counselor	Belle of Antelope.	P. Peterson	Sites.
	Cows—2d Rosely K.	Counselor	Rosely K.	P. Peterson	Sites.
	Ruby B.	Rowena's D. of Airdrie 3d	Leonora B.	P. Peterson	Sites.
	True B.	Rowena's D. of Airdrie 3d.	Allie B.	P. Peterson	Sites.
	Patty	Counselor	5th Belle of Antelope	P. Peterson	Sites.
	Bull—26th Kirklevington of F. H.	5th Kirklevington of F. H.	10th Rose of Forest Home	P. Peterson	Sites.
	Cows—Oxford Rose 11th	Duke of Kirklevington	Oxford Rose 3d	P. Peterson	Sites.
	Oxford Rose 12th	5th Kirklevington of F. H.	Oxford Rose 6th	P. Peterson	Sites.
	28th Rose of Forest Hill	5th Kirklevington of F. H.	2d Rose of Forest Home	P. Peterson	Sites.
	Red Dolly 27th	5th Kirklevington of F. H.	Red Dolly 2d	P. Peterson	Sites.

CLASS II—JERSEYS AND GUERNSEYS.

Bulls—Three years old and over.

Fawn	Waterman (328)	Jefferson (97)	Daisy W (700)	H. S. Sargent	Stockton.
Dk. fawn	Jersey Duke (18)	Monarch	Duchess (imp.)	Wm. Johnston	Richland.
Dk. br. & wh.	Exion (351)	Jersey Duke (18)	Matilda Lotz	Wm. Johnston	Richland.
Fawn	Earl Marmeduke (7087)	Victor of Y. B. (3809)	Millbrook Pride of Y. B.	Levi Carter	Ceres.
Sq. gray	Billy Ralston (365)	William (38)	Oakland Queen	Thos. Warde	Oakland.
Dk. sq. gray	Warwick (301)	Jersey Duke (18)	Ida H.	James Askev	El Dorado.
Fawn	Bost			Thos. Harlan	Williams.
<i>Bulls—Two years old.</i>					
Gray	Dick	Jersey Duke (18)	Ida 4th	Wm. Johnston	Richland.
Wh. & fawn	Gladstone (121)	Bolliver M (332)	Mattie (48)	A. L. Nichols	Sacramento.
Dk. sorrel	Maude's Olaf (15985)			Thos. Warde	Oakland.
<i>Bulls—One year old.</i>					
Joe	Rhoderic Dhu		Sibyl	Wm. Johnston	Richland.
Dan	Rhoderic Dhu		Martha	Wm. Johnston	Richland.
Livingstone (423)	Ben Lomond		Dina A (193)	A. L. Nichols	Sacramento.
King of Y. B. (18902)	Ada's Pearl		Queen of Y. B.	W. C. Smith	Florin.
Silver King	Maud's Olaf		Bonita	Thos. Warde	Oakland.
<i>Bull Calves.</i>					
Aloha S (20014)	Michael Angelo (10116)		Maria of Edge Hill (8869)	H. S. Sargent	Stockton.
Black Bart (26546)	Lawgiver (14870)		Dido Baker (38856)	L. F. Eaton	Florin.
Tom	Warwick (301)		Jersey Belle (126)	James Askev	El Dorado.
<i>Cows—Three years old and over.</i>					
Fawn	Daisy W (700)	Beecher	Whittier cow	H. S. Sargent	Stockton.
White and f.	Lillie Dale (747)	Jefferson (97)	Minnie (200)	H. S. Sargent	Stockton.
Dark fawn	Edith of Lorne (403)	Jersey Duke (18)	Maid of Lorne	Wm. Johnston	Richland.
W. and d'k f.	Griselda (404)	Jersey Duke	Matilda Lotz	Wm. Johnston	Richland.
Light fawn	Mayblossom (720)	Jersey Duke	Joe Hill	Wm. Johnston	Richland.
Dark fawn	Sibyl (807)	Jersey Duke	Lora	Wm. Johnston	Richland.
Fawn	Ellie Douglas (706)	Jersey Duke	Lillie H.	Wm. Johnston	Richland.
Fawn	Cleo (801)	Jersey Duke	Jersey Doll	Wm. Johnston	Richland.
Fawn	Jersey Duchess (707)	Sankey (56)	Crocle Belle (86)	A. L. Nichols	Sacramento.
Fawn	Mirabelle (48)	Sector of Plymouth Rock (imp.)	Lillie Nix (11053)	A. L. Nichols	Sacramento.
Fawn	Flora Nix (24818)	Glory of the Pacific	Ida 3d (2254)	W. C. Smith	Florin.
Fawn	Irene of Staatsburg (2889)	Walter Scott	Jennie June	Thos. Warde	Oakland.
Fawn	Lady Maude (24)		Flora	Thos. Warde	Oakland.
Fawn	Phillis (298)				
Fawn	Pacific Mignon				

FIRST DEPARTMENT—Continued.

Color.	Name.	Sire.	Dam.	Owner.	Residence.
Pawn	Anita	William	Mala of F. H.	Thos. Warde	Oakland.
Pawn	Jersey Belle	Surprise	Poody	J. Askew	El Dorado.
Pawn	Queen (129)	Gen. Grant	Jersey Belle	J. Askew	El Dorado.
Squirrel g.	2d Duchess of El Dorado	Gen. Grant	1st Duchess of El Dorado	J. Askew	El Dorado.
Squirrel g.	Daisy	1st Duke of El Dorado	Jersey Belle	J. Askew	El Dorado.
<i>Cows—Two years old.</i>					
Pawn	Nova	Fred Baker	Belle	Frank Lowell	Sacramento.
Pawn	Lockeford Belle (879)	Earl Mameluke (781)	Lilac 3d	H. S. Sargent	Stockton.
Br'n and w.	Julia W (984)	Jefferson (327)	Queenie	H. S. Sargent	Stockton.
Pawn	Minnie Warren (878)	Jefferson	Jalac's Last	H. S. Sargent	Stockton.
Pawn	Amy Platt (987)	Earl of Lockeford (303)	Princess May	H. S. Sargent	Stockton.
Pawn	Matilda Lotz 2d	Jersey Duke (18)	Matilda Lotz	Wm. Johnston	Richland.
White and f.	Beauty 3d	Jersey Duke	Beauty 2d	Wm. Johnston	Richland.
White and f.	Constance De B (809)	Jersey Duke	Pauline	Wm. Johnston	Richland.
White and f.	Griselda 2d	Jersey Duke	Griselda	Wm. Johnston	Richland.
<i>Cows—One year old.</i>					
Pawn	Peg Woffington	Earl of Lockeford	Kittie C	H. S. Sargent	Stockton.
Pawn	Modjeska	Gray Night	Blanche 3d	H. S. Sargent	Stockton.
Gray	Susie of El Pinal	Gray Night	Queenie	H. S. Sargent	Stockton.
Pawn	Ellen Douglas 2d	Rhodoric Dhu	Ellen Douglas	Wm. Johnston	Richland.
Pawn	Cleo 2d	Rhodoric Dhu	Cleo	Wm. Johnston	Richland.
Pawn	Belle Bria	Ben Lomond	Mirabelle	A. L. Nichols	Sacramento.
Pawn	Dolly A	Rhodoric Dhu	Twin's Paughter	A. L. Nichols	Sacramento.
Pawn	Martha of Florin	Lawgiver	Irene of Staatsburg	W. C. Smith	Florin.
Pawn	Violet 3d				
Pawn	Olafura	Maud's Olaf	Pacific Mignon	Thos. Warde	Oakland.
Pawn	Oakland Queen	Prince of Tulare		Thos. Warde	Oakland.
Pawn	Lady Wickham 2d		Malo of F. H.	Thos. Warde	Oakland.
<i>Calmes—Heifers.</i>					
Pawn	Beauty 4th	Jersey Duke	Beauty 2d	Wm. Johnston	Richland.
Pawn	Flora Nix 2d	Jersey Duke	Sybil	Wm. Johnston	Richland.
Wh. and fwn	Gertrude	Ben Lomond	Flora Nix	A. L. Nichols	Sacramento.
Wh. and fwn	Vilette	Jersey Duke	Haidee	A. L. Nichols	Sacramento.
Pawn	Mono of Florin	Ixon	Martha	A. L. Nichols	Sacramento.
Squir. gray	Mountain Pink	Lawgiver	Irene of Staatsburg	W. C. Smith	Florin.
		Warwick	Queen	Jas. Askew	El Dorado.

Squir. gray.	Lucy	Warwick.	Daisy	Jas. Askew	El Dorado.
Squir. gray.	4th Duchess of El Dorado.	Warwick.	Warwick.	Jas. Askew	El Dorado.
	<i>Herd—Over two years old.</i>				El Dorado.
	Bull—Waterman.	Jefferson.	Jefferson.	H. S. Sargent.	Stockton.
	Cows—Daisy W.	Beecher.	Beecher.	H. S. Sargent.	Stockton.
	Lily Dale.	Jefferson.	Jefferson.	H. S. Sargent.	Stockton.
	Lockeford Belle.	Earl Mameluke.	Earl Mameluke.	H. S. Sargent.	Stockton.
	Amy Platt.	Earl Lockeford.	Earl Lockeford.	H. S. Sargent.	Stockton.
	Minnie Warren.	Jefferson.	Jefferson.	H. S. Sargent.	Stockton.
	Bull—Warwick.	Jersey Duke.	Jersey Duke.	James Askew	El Dorado.
	Cows—Jersey Belle.	Surprise.	Surprise.	James Askew	El Dorado.
	Queen.	General Grant.	General Grant.	James Askew	El Dorado.
	Duchess of El Dorado.	Duchess of El Dorado.	Duchess of El Dorado.	James Askew	El Dorado.
	Daisy.	1st Duke of El Dorado.	1st Duke of El Dorado.	James Askew	El Dorado.
	Bull—Jersey Duke.	Monarch.	Monarch.	Wm. Johnston.	Richland.
	Cows—Mayblossom.	Jersey Duke.	Jersey Duke.	Wm. Johnston.	Richland.
	Griselda.	Jersey Duke.	Jersey Duke.	Wm. Johnston.	Richland.
	Cleo.	Jersey Duke.	Jersey Duke.	Wm. Johnston.	Richland.
	Ellen Douglas.	Jersey Duke.	Jersey Duke.	Wm. Johnston.	Richland.
	<i>Herd—Under two years old.</i>				
	Bull—Silver King.	Maud's Olaf.	Maud's Olaf.	Thos. Warde.	Oakland.
	Cows—Oakland Queen.	Prince of Tulare.	Prince of Tulare.	Thos. Warde.	Oakland.
	Lady Wickham 2d.			Thos. Warde.	Oakland.
	Olafura.			Thos. Warde.	Oakland.
	Violet 3d.			Thos. Warde.	Oakland.
	<i>Steepstakes—Bull of any age.</i>				
Silver gray.	Aloha S (2d14).	Michael Angelo.	Michael Angelo.	H. S. Sargent.	Stockton.
Silver gray.	Billy Baulston (365).	William.	William.	Thos. Warde.	Oakland.
Fawn.	Jersey Duke (18).	Monarch.	Monarch.	Wm. Johnston.	Richland.
	<i>Steepstakes—Cow of any age.</i>				
Fawn.	Daisy W (700).	Beecher.	Beecher.	H. S. Sargent.	Stockton.
	<i>CLASS IV—AYRSHIRE CATTLE.</i>				
	<i>Bulls—Two years old.</i>				
Red and wh.	Lord Faxon (1314).	Archie (3432).	Archie (3432).	G. Benent & Son.	San Pablo.
	<i>Fulls—One year old.</i>				
Red.	Mikado (1315).	Electioneer (3576).	Electioneer (3576).	G. Benent & Son.	San Pablo.
Red and wh.	Hotspur (1502).	Archie (3432).	Archie (3432).	G. Benent & Son.	San Pablo.

FIRST DEPARTMENT—Continued.

Color.	Name.	Sire.	Dam.	Owner.	Residence.
Red and wh.	<i>Bulls—Calves.</i> Express (4503).....	Archie (3432).....	Elaine (7401).....	G. Bement & Son.....	San Pablo.
Red and wh.	<i>Cows—Three years old and over.</i> Highland Mary.....	Archie (3432).....	Highland Lassie.....	G. Bement & Son.....	San Pablo.
Red and wh.	Sybilla (7859).....	Archie (3432).....	Sybil (7404).....	G. Bement & Son.....	San Pablo.
Red	Marian (7408).....	Archie (3432).....	Mariam (2905).....	G. Bement & Son.....	San Pablo.
Red and wh.	<i>Cows—Two years old.</i> Ethel Berta (9579).....	Archie (3432).....	Ethel Brown (4504).....	G. Bement & Son.....	San Pablo.
Red and wh.	<i>Cows—One year old.</i> Faxonia (9521).....	Archie (3432).....	Lady Faxon (7551).....	G. Bement & Son.....	San Pablo.
Red and wh.	<i>Heifers—Calves.</i> Fron Fron (9864).....	Archie (3432).....	Lady Faxon (7551).....	G. Bement & Son.....	San Pablo.
Red	Highland Beauty.....	Archie (3432).....	Highland Mary.....	G. Bement & Son.....	San Pablo.
	<i>Herd.</i> Bull—Lord Faxon (4314).....	Archie (3432).....	Lady Faxon (7551).....	G. Bement & Son.....	San Pablo.
	Cows—Sybilla (7869).....	Archie (3432).....	Sybil (7404).....	G. Bement & Son.....	San Pablo.
	Faxonia (9521).....	Archie (3432).....	Lady Faxon (7551).....	G. Bement & Son.....	San Pablo.
	Fron Fron (9864).....	Archie (3432).....	Lady Faxon (7551).....	G. Bement & Son.....	San Pablo.
	Marian (7408).....	Archie (3432).....	Mariam (2905).....	G. Bement & Son.....	San Pablo.
Red and wh.	<i>Sweepstakes—Bull of any age.</i> Lord Faxon (4314).....	Archie (3432).....	Lady Faxon (7551).....	Geo. Bement & Son.....	San Pablo.
Red and wh.	<i>Sweepstakes—Cow of any age.</i> Sybilla (7809).....	Archie (3432).....	Sybil (7404).....	Geo. Bement & Son.....	San Pablo.
Red and wh.	CLASS V—HEREFORDS. <i>Bulls—Two years old.</i> Prince (31777).....	Leatard (15576).....	Alice 2d (4351).....	J. L. McCracken.....	Auburn.
Red and wh.	<i>Bulls—One year old.</i> Howard (31772).....	Fair Boy (17418).....	Pinky 5th (15571).....	J. L. McCracken.....	Auburn.

Red and wh.	<i>Bulls—Calves.</i> Gay Lad (34516).....	Cyrus (25236).....	Grace (17416).....	J. L. McCracken.....	Auburn.
Red and wh.	<i>Cows—Three years old and over.</i> Eva S (15880).....	Gay Lad (4232).....	Fancy (825).....	J. L. McCracken.....	Auburn.
Red and wh.	Mabel (17417).....	Centennial (1530).....	Eva S (5886).....	J. L. McCracken.....	Auburn.
Red and wh.	<i>Cows—One year old.</i> Leda (34518).....	Leatard (15576).....	Hinton (13186).....	J. L. McCracken.....	Auburn.
Red and wh.	Fair Maid (34375).....	Leatard (15576).....	Eva S.....	J. L. McCracken.....	Auburn.
Red and wh.	<i>Heifers—Calves.</i> Kitty (34517).....	Leatard (15576).....	Mabel.....	J. L. McCracken.....	Auburn.
Red and wh.	Lily (34519).....	Dan (25112).....	Alice 2d.....	J. L. McCracken.....	Auburn.
Red and wh.	<i>Herd.</i> Bull—Prince (31777).....	Leatard (15576).....	Alice 2d (4351).....	J. L. McCracken.....	Auburn.
Red and wh.	Cow—Eva S (15880).....	Gay Lad (4232).....	Fancy 3d.....	J. L. McCracken.....	Auburn.
Red and wh.	Mabel (17417).....	Centennial (1530).....	Eva S (5886).....	J. L. McCracken.....	Auburn.
Red and wh.	Grace (17416).....	Centennial (1530).....	Alice 2d (4351).....	J. L. McCracken.....	Auburn.
Red and wh.	Hinton (13186).....	Foreign Security (4144).....	Lively (4299).....	J. L. McCracken.....	Auburn.
Red and wh.	<i>Sweepstakes—Bull of any age.</i> Prince (3177).....	Leatard (15576).....	Alice 2d (4351).....	J. L. McCracken.....	Auburn.
Red and wh.	<i>Sweepstakes—Cow of any age.</i> Eva S (15880).....	Gay Lad (4232).....	Fancy.....	J. L. McCracken.....	Auburn.
CLASS VI.—HOLSTEIN OR FRIESIAN CATTLE.					
Bl'k and wh.	<i>Bulls—Three years old and over.</i> Mahomet of Palo Alta (2688).....	Mahomet 3d (1259).....	Clarissa (2281).....	Leland Stanford.....	San Francisco.
Bl'k and wh.	Nadine Veeman (4101).....	Wiebren Veeman.....	Nadine (5340).....	Leland Stanford.....	San Francisco.
Bl'k and wh.	Sedro (3168).....	Herder (2331).....	Antje Laan (4237) (imp.).....	F. H. Burke.....	Menlo Park.
Bl'k and wh.	<i>Bulls—Two years old.</i> El Cuervo Netherlands (3235).....	Netherland King (1924).....	Phillis Lincoln (9921).....	F. H. Burke.....	Menlo Park.
Bl'k and wh.	Van Moltke (3235).....	Henry of Aaggie (454).....	Portia Lincoln (10026).....	F. H. Burke.....	Menlo Park.
Bl'k and wh.	<i>Bulls—One year old.</i> Montague (3169).....	Mahomet of Pa. Alto (2688).....	Isma (5529).....	Leland Stanford.....	San Francisco.
Bl'k and wh.	Capendore (7431).....	Minellus Prince (1218).....	Fetema (9723).....	Leland Stanford.....	San Francisco.
Bl'k and wh.	King of Menlo (6407).....	Romley (3749) (imp.).....	Lena Wit (3840) (imp.).....	F. H. Burke.....	Menlo Park.
Bl'k and wh.	Leandro's Thistle.....	Sedro (3168).....	Thissa (9679) (imp.).....	F. H. Burke.....	Menlo Park.

FIRST DEPARTMENT—Continued.

Color.	Name.	Sire.	Dam.	Owner.	Residence.
	<i>Bulls—Calves.</i>				
Bl'k and wh.	Amargan (9206)	San José (1216)	Georgie Truman (1517)	Leland Stanford	San Francisco.
Bl'k and wh.	Osund (9207)	San Miguel (1220)	Abdaletta (6847)	Leland Stanford	San Francisco.
Bl'k and wh.	Legrand Twisk (9231)	Nadine's Promoter (2972)	Prince Twist's Laura (10201)	F. H. Burke	Menlo Park.
Bl'k and wh.		El Guerrero Netherland (3236)	Jacob's Lily (1936)	F. H. Burke	Menlo Park.
	<i>Cows—Three years old.</i>				
Bl'k and wh.	Pansyne	Imported	Imported	Leland Stanford	San Francisco.
Bl'k and wh.	Pietja Piersma	Imported	Imported	Leland Stanford	San Francisco.
Bl'k and wh.	Sylpha	Boersman's Bull	Bontje	F. H. Burke	Menlo Park.
Bl'k and wh.	Ryeless	Imported	Imported	F. H. Burke	Menlo Park.
Bl'k and wh.	Thissa	Jochem (imp.)	Stins (imp.)	F. H. Burke	Menlo Park.
	<i>Cows—Two years old.</i>				
Bl'k and wh.	Ledo	Wiebren Veeman	Josie Lyle	Leland Stanford	San Francisco.
Bl'k and wh.	Morosa	Mahomet of Palo Alto	Jacob Wit Minella	Leland Stanford	San Francisco.
Bl'k and wh.	Onterette	Henry of Aaggie	Annetta Lincoln	F. H. Burke	Menlo Park.
	<i>Cows—One year old.</i>				
Bl'k and wh.	Mecox	Le Moine	Lady Anstys	Leland Stanford	San Francisco.
Bl'k and wh.	Zorrita	Minellas Prince	Santa Maria	Leland Stanford	San Francisco.
Bl'k and wh.	Belanga	Aaggie 4th Rowland	Jacob's Vernie	F. H. Burke	Menlo Park.
	<i>Heifers—Calves.</i>				
Bl'k and wh.	Ojinegro	Minellas Prince	Lady Anstys	Leland Stanford	San Francisco.
Bl'k and wh.	Pating	Mahomet of Palo Alto	Jacob Wit Minella	Leland Stanford	San Francisco.
Bl'k and wh.	Bontje Lincoln 2d	Sedro	Bontje Lincoln	F. H. Burke	Menlo Park.
Bl'k and wh.	Little Minch	Billee Taylor	Jacob's Elizabeth	F. H. Burke	Menlo Park.
	<i>Herds.</i>				
	Bull—Nadine Veeman	Wiebren Veeman	Nadine	Leland Stanford	San Francisco.
	Cows—Jansyne	Imported	Imported	Leland Stanford	San Francisco.
	Laurentine	Imported	Imported	Leland Stanford	San Francisco.
	Clarissa	Imported	Imported	Leland Stanford	San Francisco.
	Pietja Piersma	Imported	Imported	Leland Stanford	San Francisco.
	Bull—Sedro	Herder (imp.)	Antjeleian	F. H. Burke	Menlo Park.
	Cows—Sylpha	Boersman's Bull (imp)	Bontje (imp.)	F. H. Burke	Menlo Park.
	Ryeless	Imported	Imported	F. H. Burke	Menlo Park.
	Clarissa	Jochen (imp.)	Stins (imp.)	F. H. Burke	Menlo Park.

Onterette	Henry of Aaggie	Annetta Lincoln	F. H. Burke	Menlo Park.
<i>Sweepstakes—Bull of any age.</i>				
Blk and wh.	Weibren Veeman	Nadine	Leland Stanford	San Francisco.
Blk and wh.	Herder	Anjelaan	F. H. Burke	Menlo Park.
<i>Sweepstakes—Cow of any age.</i>				
Blk and wh.	Imported	Bontje (imp.)	Leland Stanford	San Francisco.
Blk and wh.	Boersman's Bull		F. H. Burke	Menlo Park.
CLASS VIII—GRADED CATTLE.				
<i>Cows—Three years old and over.</i>				
Brown	Jersey		Willie Tryon	Sacramento.
<i>Cows—Two years old.</i>				
Brown	Pet		Wm. Tryon	Sacramento.
<i>Cows—One year old.</i>				
Red	Red Belle	Daisy	P. H. Murphy	Brighton.
Blue gray	Blue		Wm. Tryon	Sacramento.
<i>Heifers—Calves.</i>				
Fawn	Annie		John Riley	Sacramento.
Brown	Beauty		Wm. Tryon	Sacramento.
Rouan	Speck		Wm. Tryon	Sacramento.
CLASS IX—HERD SWEETSTAKES.				
<i>Beef Breeds—One Bull and four Cows.</i>				
Bull—Magwump	Kirklevington Carol	Belle Medico	W. Page	Penn's Grove.
Cows—Malta	Kirklevington Carol	Madie	W. Page	Penn's Grove.
Belle Strawberry	Cherry Prince	Rosa Bella	W. Page	Penn's Grove.
Belle Medico	El Medico	Belle Napier	W. Page	Penn's Grove.
Henrietta Page	Sonoma	Rose Sonoma	W. Page	Penn's Grove.
Bull—Kirklevington Oxford Count	Kirklevington Duke 2d	Wildyes Craggs 2d	P. S. Childs	Davisville.
Cows—Belle 27th	Kirklevington Duke 2d	Belle 14th	P. S. Childs	Davisville.
Hattie	Rouan Duchess Oxford	Hattie James 4th	P. S. Childs	Davisville.
Flora 16th	Kirklevington Duke 2d	Flora 2d	P. S. Childs	Davisville.
Burnetta 7th	Rouan Duchess Oxford	Burnetta 2d	C. Younger	Davisville.
Bull—3d Kirklevington of Forest Home	Duke of Kirklevington	Oxford Rose 3d	C. Younger	Davisville.
Cows—Oxford Rose 11th	Duke of Kirklevington	Oxford Rose 3d	C. Younger	Davisville.
Jessie Maynard 4th	Duke of Kirklevington	Oxford Rose 3d	C. Younger	Davisville.
Amelia 12th	5th Kirklevington of F. H.	Amelia 10th	C. Younger	San José.
28th Rose of Forest Home	5th Kirklevington of F. H.	2d Belle of Avon Ranch	C. Younger	San José.

FIRST DEPARTMENT—Continued.

Color.	Name.	Sire.	Dam.	Owner.	Residence.
-----	Bull—Mazurka Duke.	-----	-----	Bridford & Mul-	-----
-----	Cows—Manunga	-----	-----	ligan	Colusa.
-----	Lucy Jane	-----	-----	Bridford & Mul-	-----
-----	Manunga 2d	-----	-----	ligan	Colusa.
-----	Manunga 3d	Catchpenny	Manunga	Bridford & Mul-	-----
-----	-----	Counselor	-----	ligan	Colusa.
-----	Bull—Oxford Duke 2d	Oxford Duke.	Xylophia 5th.	W. Jacobs	-----
-----	Cows—Xylophia 6th	Logan	Xylophia 5th.	W. Jacobs	Sacramento.
-----	Lone Butterfly	Duke Butterfly	Happy Mary	W. Jacobs	Sacramento.
-----	Duchess of Durham	Viscount	Duchess of Durham 14th.	W. Jacobs	-----
-----	Mary Barrington	Barrington Duke	Red Rose Mary	W. Jacobs	Sacramento.
-----	Bull—Counselor	Commissioner	Beauty 2d Maid	P. Peterson	-----
-----	Cows—Rosely K	Hancock	2d Belle of Antelope	P. Peterson	Sites.
-----	Ruby B	Rowena's Duke of Airdrie.	Lenora B	P. Peterson	Sites.
-----	True B	Rowena's Duke of Airdrie.	Allie B	P. Peterson	Sites.
-----	Rosely K 2d	Counselor	Rosely K	P. Peterson	Sites.
<i>Milk Breeds.</i>					
Bl'k and wh.	Nadine Veeman	Weibren Veeman	Nadine	L. Stanford	San Francisco.
Bl'k and wh.	Pansyne	Imported	-----	L. Stanford	San Francisco.
Bl'k and wh.	Laurentine	Imported	-----	L. Stanford	San Francisco.
Bl'k and wh.	Clarissa	Imported	-----	L. Stanford	San Francisco.
Bl'k and wh.	Pietja Piersma	Imported	-----	L. Stanford	San Francisco.
Bl'k and wh.	Sedro	Herder	Imported Antjlaan	F. H. Burke	Menlo Park.
Bl'k and wh.	Sylpha	Imported	Imported	F. H. Burke	Menlo Park.
Bl'k and wh.	Thissa	Imported	Imported	F. H. Burke	Menlo Park.
Bl'k and wh.	Winnetta Ray	Imported	Imported	F. H. Burke	Menlo Park.
Bl'k and wh.	Onferette	Sir Henry of Aaggie	Phillis Lincoln	F. H. Burke	Menlo Park.
CLASS X—MILCH COWS—Any age or breed.					
Bl'k and wh.	Pansyne	Imported	-----	L. Stanford	San Francisco.
Bl'k and wh.	Sylpha	Boersman's Bull	Bontje	F. H. Burke	Menlo Park.
Bl'k and wh.	Kyeless	Imported	-----	F. H. Burke	Menlo Park.
Bl'k and wh.	Onferette	Henry of Aaggie	Annetta Lincoln	F. H. Burke	Menlo Park.

FIRST DEPARTMENT—Continued.

SHEEP.

NAME.	Owner.	Residence.
CLASS I—SPANISH MERINOS.		
<i>Ram—Two years old and over.</i>		
King George.....	F. Bullard	Woodland.
<i>Ram—One year old and under two.</i>		
Clingstone	F. Bullard	Woodland.
<i>Three Ram Lambs.</i>		
Three ram lambs.....	F. Bullard	Woodland.
<i>Pen of not less than five Ewes—Two years old and over.</i>		
One pen.....	F. Bullard	Woodland.
<i>Pen of not less than five Ewes—One year old and under two.</i>		
One pen.....	F. Bullard	Woodland.
<i>Pen of not less than five Ewe Lambs.</i>		
One pen.....	F. Bullard	Woodland.
<i>Ram and five of his Lambs.</i>		
King George and five lambs.....	F. Bullard	Woodland.
CLASS II—FRENCH MERINOS.		
<i>Ram—Two years old and over.</i>		
Fernando.....	J. Roberts	Irvington.
<i>Ram—One year old and under two.</i>		
Napier.....	J. Roberts	Irvington.
<i>Three Ram Lambs.</i>		
One pen.....	J. Roberts.....	Irvington.
<i>Pen of not less than five Ewes, two years old and over.</i>		
One pen.....	J. Roberts.....	Irvington.
<i>Pen of not less than five Ewes, one year old and under two.</i>		
One pen.....	J. Roberts.....	Irvington.
<i>Pen of not less than five Ewe Lambs.</i>		
One pen.....	J. Roberts.....	Irvington.
<i>Ram and five of his Lambs.</i>		
Fernando and five lambs	J. Roberts.....	Irvington.
CLASS IV—LEICESTERSHIRE AND COTSWOLD.		
<i>Ram of any age.</i>		
Just Right.....	Coleman Younger & Son.....	San José.
<i>Pen of Ewes, not less than five, of any age.</i>		
One pen.....	Coleman Younger & Son.....	San José.
<i>Ram and five of his Lambs.</i>		
Just Right and five lambs	Coleman Younger & Son.....	San José.
CLASS V—SHROPSHIRE.		
<i>Ram of any age.</i>		
Royal Duke (imported).....	Andrew Smith	Redwood City.
Jumbo	J. H. Glide	Sacramento.

FIRST DEPARTMENT—Continued.

NAME.	Owner.	Residence.
<i>Pen of Ewes, not less than five of any age.</i>		
One pen	Andrew Smith	Redwood City.
<i>Ram and five of his Lambs.</i>		
Royal Duke and five lambs	Andrew Smith	Redwood City.
<i>Three Ram Lambs.</i>		
Royal Duke, sire; three ram lambs	Andrew Smith	Redwood City.
<i>Pen of five Ewe Lambs.</i>		
One pen	Andrew Smith	Redwood City.
CLASS VI—SWEEPSTAKES.		
<i>Ram of any age or breed and five of his Lambs.</i>		
Royal Duke and five lambs (Shropshire) ..	Andrew Smith	Redwood City.
King George and five lambs (Sp. Merino) ..	Frank Bullard	Woodland.
Just Right and five lambs (Coltswoold) ..	Coleman Younger	San José.
Fernando and five lambs (Fr. Merino) ..	J. Roberts	Irvington.

ANGORA GOATS.

NAME.	Owner.	Residence.
THOROUGHBREDS.		
<i>Bucks—Two years old and over.</i>		
Mahomet 2d	Julius Weyand	Little Stoney.
Colonel Peters	Julius Weyand	Little Stoney.
Atlanta	Julius Weyand	Little Stoney.
Governor Helm	T. H. Harlan	Williams.
<i>Bucks—Under two years old.</i>		
One buck	Julius Weyand	Little Stoney.
One buck	Julius Weyand	Little Stoney.
One buck	Julius Weyand	Little Stoney.
Anglo	T. H. Harlan	Williams.
<i>Pen of not less than three Does—Two years old and over.</i>		
One pen	Julius Weyand	Little Stoney.
One pen	T. H. Harlan	Williams.
<i>Pen of not less than three Does—Under two years old.</i>		
One pen	Julius Weyand	Little Stoney.
One pen	T. H. Harlan	Williams.
GRADED.		
<i>Pen of not less than three Does—Two years old and over.</i>		
One pen	Julius Weyand	Little Stoney.
One pen	T. H. Harlan	Williams.
<i>Pen of not less than three Does—Under two years old.</i>		
One pen	Julius Weyand	Little Stoney.
One pen	T. H. Harlan	Williams.
<i>Herd of not less than ten—Of any breed or age.</i>		
One herd	Julius Weyand	Little Stoney.
One herd	T. H. Harlan	Williams.

FIRST DEPARTMENT—Continued.

SWINE.

NAME.	Owner.	Residence.
CLASS I—BERKSHIRE.		
<i>Boar—Two years old and over.</i>		
Redwood Duke	Andrew Smith	Redwood City.
Bismarck	William Jacobs	Sacramento.
<i>Boar—One year old and under two years.</i>		
Brighton	T. Waite	Perkins.
Peploe	A. Smith	Redwood City.
Duke of Pino I	William Jacobs	Sacramento.
<i>Boar—Six months old and under one year.</i>		
Dan Corbitt	T. Waite	Perkins.
Redwood Duke 3d	A. Smith	Redwood City.
Hamilton Duke	W. Jacobs	Sacramento.
<i>Breeding Sow—Two years old and over.</i>		
Redwood Lass 2d	A. Smith	Redwood City.
Pino 5th	W. Jacobs	Sacramento.
<i>Sow—One year old and under two years.</i>		
Redwood Sallie 3d	A. Smith	Redwood City.
Belle of Pino I	W. Jacobs	Sacramento.
<i>Sow—Six months old and under one year.</i>		
Redwood Sallie 6th	A. Smith	Redwood City.
Belle Hamilton	W. Jacobs	Sacramento.
Brighton Lass	T. Waite	Perkins.
<i>Sow and six Pigs under three months old.</i>		
Redwood Lass and six pigs	A. Smith	Redwood City.
Redwood Belle and six pigs	T. Waite	Perkins.
Rosa Pino I and five pigs (by common consent)	W. Jacobs	Sacramento.
<i>Pair of Pigs under six months old.</i>		
Brighton Boy	T. Waite	Perkins.
Brighton Girl	T. Waite	Perkins.
Redwood Duke 4th	A. Smith	Redwood City.
Redwood Sallie 10th	A. Smith	Redwood City.
Duke Pino V	W. Jacobs	Sacramento.
Duchess Pino V	W. Jacobs	Sacramento.
ESSEX.		
<i>Boar—Two years old and over.</i>		
Tyler	Geo. Bement & Son	San Pablo.
<i>Boar—Six months old and under one year.</i>		
One boar	Geo. Bement & Son	San Pablo.
<i>Breeding Sow—Two years old and over.</i>		
Josie	Geo. Bement & Son	San Pablo.
<i>Sow—One year old and under two years.</i>		
Belle Hewitt	Geo. Bement & Son	San Pablo.
<i>Sow—Six months old and under one year.</i>		
Nan Hewitt	Geo. Bement & Son	San Pablo.
<i>Pair of Pigs—Under six months old.</i>		
One pair	Geo. Bement & Son	San Pablo.
One pair	Geo. Bement & Son	San Pablo.
One pair	Geo. Bement & Son	San Pablo.

FIRST DEPARTMENT—Continued.

NAME.	Owner.	Residence.
CLASS III—POLAND CHINA.		
<i>Boar—Two years old and over.</i>		
Bismarck	Paul Sheppa	Batavia.
<i>Boar—Six months old and under one year.</i>		
Young Lamson	P. H. Murphy	Brighton.
<i>Sow—Six months old and under one year.</i>		
Black Beauty	P. H. Murphy	Brighton.
<i>Pair of Pigs—Under six months old.</i>		
Tippecanoe	Paul Sheppa	Batavia.
Beauty	Paul Sheppa	Batavia.
SWEEPSTAKES.		
<i>Boars—Of any age or breed.</i>		
Redwood Duke (Berkshire)	A. Smith	Redwood City.
Bismarck (Berkshire)	W. Jacobs	Sacramento.
Bismarck (Poland-China)	P. Sheppa	Batavia.
<i>Sow—Of any age or breed.</i>		
Redwood Sallie 3d (Berkshire)	A. Smith	Redwood City.
Pino 5th	W. Jacobs	Sacramento.
<i>Pen of six Pigs—Under six months.</i>		
One pen (Berkshire)	A. Smith	Redwood City.
One pen (Essex)	Geo. Bement & Son	San Pablo.
<i>Family—Of all same breed, consisting of one Boar, two Sows, and six Pigs.</i>		
Redwood Duke, } Redwood Sallie, } Redwood Lass, } And six pigs, }	Berkshire	Redwood City.
Family (Essex), as above required	Geo. Bement & Son	San Pablo.

POULTRY.

NAME.	Owner.	Residence.
LIGHT BRAHMAS.		
<i>Cock and Hen.</i>		
One cock and hen	T. Waite	Perkins.
One cock and hen	G. E. Duden	Sacramento.
<i>Cockerel and Pullet.</i>		
One cockerel and pullet	T. Waite	Perkins.
<i>Breeding Pen—One male and four females.</i>		
One breeding pen	T. Waite	Perkins.
DARK BRAHMAS.		
<i>Breeding Pen—One male and four females.</i>		
One breeding pen	G. E. Duden	Sacramento.
LANGSHANS.		
<i>Cock and Hen.</i>		
One cock and hen	T. Waite	Perkins.
One cock and hen	W. Jacobs	Sacramento.
<i>Cockerel and Pullet.</i>		
One cockerel and pullet	W. Jacobs	Sacramento.

FIRST DEPARTMENT—Continued.

NAME.	Owner.	Residence.
<i>Breeding Pen—One male and four females.</i>		
One breeding pen	T. Waite	Perkins.
One breeding pen	W. Jacobs	Sacramento.
BUFF COCHINS.		
<i>Cockerel and Pullet.</i>		
One cockerel and pullet	T. Waite	Perkins.
PARTRIDGE COCHINS.		
<i>Cock and Hen.</i>		
One cock and hen	T. Waite	Perkins.
<i>Cockerel and Pullet.</i>		
One cockerel and pullet	T. Waite	Perkins.
<i>Breeding Pen—One male and four females.</i>		
One breeding pen	T. Waite	Perkins.
PLYMOUTH ROCKS.		
<i>Cock and Hen.</i>		
One cock and hen	T. Waite	Perkins.
One cock and hen	G. E. Duden	Sacramento.
<i>Cockerel and Pullet.</i>		
One cockerel and pullet	T. Waite	Perkins.
One cockerel and pullet	G. E. Duden	Sacramento.
<i>Breeding Pen—One male and four females.</i>		
One breeding pen	T. Waite	Perkins.
One breeding pen	G. E. Duden	Sacramento.
BROWN LEGHORNS.		
<i>Cock and Hen.</i>		
One cock and hen	T. Waite	Perkins.
One cock and hen	H. L. Nichols	Sacramento.
<i>Cockerel and Pullet.</i>		
One cockerel and pullet	T. Waite	Perkins.
One cockerel and pullet	H. L. Nichols	Sacramento.
One cockerel and pullet	G. E. Duden	Sacramento.
<i>Breeding Pen—One male and four females.</i>		
One breeding pen	T. Waite	Perkins.
One breeding pen	H. L. Nichols	Sacramento.
One breeding pen	G. E. Duden	Sacramento.
WHITE LEGHORNS.		
<i>Cock and Hen.</i>		
One cock and hen	T. Waite	Perkins.
One cock and hen	H. L. Nichols	Sacramento.
One cock and hen	G. E. Duden	Sacramento.
<i>Cockerel and Pullet.</i>		
One cockerel and pullet	H. L. Nichols	Sacramento.
One cockerel and pullet	G. E. Duden	Sacramento.
<i>Breeding Pen—One male and four females.</i>		
One breeding pen	H. L. Nichols	Sacramento.
WHITE-FACED BLACK SPANISH.		
<i>Cock and Hen.</i>		
One cock and hen	T. Waite	Perkins.
One cock and hen	G. E. Duden	Sacramento.

TRANSACTIONS OF THE
FIRST DEPARTMENT—Continued.

NAME.	Owner.	Residence.
One cock and hen.....	E. B. Robinson.....	Sacramento.
One cock and hen.....	Elmo Carey.....	Sacramento.
<i>Cockerel and Pullet.</i>		
One cockerel and pullet.....	G. E. Duden.....	Sacramento.
One cockerel and pullet.....	E. B. Robinson.....	Sacramento.
One cockerel and pullet.....	Elmo Carey.....	Sacramento.
<i>Breeding Pen—One male and four females.</i>		
One breeding pen.....	T. Waite.....	Perkins.
One breeding pen.....	E. B. Robinson.....	Sacramento.
HOUDANS.		
<i>Cock and Hen.</i>		
One cock and hen.....	T. Waite.....	Perkins.
One cock and hen.....	G. E. Duden.....	Sacramento.
<i>Cockerel and Pullet.</i>		
One cockerel and pullet.....	T. Waite.....	Perkins.
<i>Breeding Pen—One male and four females.</i>		
One breeding pen.....	T. Waite.....	Perkins.
SILVER-SPANGLED HAMBURGS.		
<i>Cock and Hen.</i>		
One cock and hen.....	T. Waite.....	Perkins.
<i>Cockerel and Pullet.</i>		
One cockerel and pullet.....	T. Waite.....	Perkins.
<i>Breeding Pen—One male and four females.</i>		
One breeding pen.....	T. Waite.....	Perkins.
POLISH.		
<i>Cock and Hen.</i>		
One cock and hen.....	T. Waite.....	Perkins.
<i>Breeding Pen—One male and four females.</i>		
One breeding pen.....	T. Waite.....	Perkins.
WYANDOTTES.		
<i>Cock and Hen.</i>		
One cock and hen.....	T. Waite.....	Perkins.
One cock and hen.....	W. Jacobs.....	Sacramento.
<i>Cockerel and Pullet.</i>		
One cockerel and pullet.....	T. Waite.....	Perkins.
One cockerel and pullet.....	G. E. Duden.....	Sacramento.
One cockerel and pullet.....	W. Jacobs.....	Sacramento.
<i>Breeding Pen—One male and four females.</i>		
One breeding pen.....	T. Waite.....	Perkins.
One breeding pen.....	G. E. Duden.....	Sacramento.
One breeding pen.....	W. Jacobs.....	Sacramento.
BLACK-BREASTED RED GAME BANTAMS.		
<i>Cock and Hen.</i>		
One cock and hen.....	T. Waite.....	Perkins.
<i>Breeding Pen—One male and four females.</i>		
One breeding pen.....	T. Waite.....	Perkins.
<i>Special Entry of Black-breasted Red Game.</i>		
One cockerel and pullet.....	Frank Lowell.....	Sacramento.

FIRST DEPARTMENT—Continued.

NAME.	Owner.	Residence.
TURKEYS.		
<i>Bronze Turkeys.</i>		
One pair	Thomas Waite	Perkins.
<i>Wild Turkeys.</i>		
One pair	Thomas Waite	Perkins.
GEESE.		
<i>Toulouse Geese.</i>		
One pair	Thomas Waite	Perkins.
One pair	Frank H. Burke	Menlo Park.
DUCKS.		
<i>Rouen Ducks.</i>		
One pair	Thomas Waite	Perkins.
One pair	Frank H. Burke	Menlo Park.
<i>Pekin Ducks.</i>		
One pair	Thomas Waite	Perkins.
One pair	Thomas Waite	Perkins.

GOLD MEDAL ENTRIES.

NAME.	Owner.	Residence.
HORSES.		
All his stock (horses) on exhibition	R. J. Merkeley	Sacramento.
Thirteen head of horses	A. D. Miller	Walsh Station.
LIVE STOCK OTHER THAN HORSES.		
<i>Durhams.</i>		
Mugwump, Holdfast, Protector, Rogue, Belt, Sonberry, Blood, Cheeseit, Parson, Princeps, Gilt Edge, To-morrow, Pickrell, Belle Medico, Maita, Henrietta Page, Belle Strawberry, Christmas Eve, Enriqueta, Belle of the Oaks, Goldnut, Zulieka, Ashburner Lass, Manuela, Sweet Milk	Wilfred Page	Penn's Grove.
<i>Holsteins.</i>		
Mahomet of Palo Alto, Nadine Veeman, Montague, Capeador, Susto, Village Lad, Brezuelo, Brovura, Bragado, Zelo, Duke of Palo Alto, Zorra, Amargon, Asuno, Pansyne, Laurentine, Clarissa, Pietza Piersma, Ledo, Morosa, Mecox, Zonita, Ojinerio, Patino	Leland Stanford	San Francisco.
<i>Durhams.</i>		
Counselor, Sullivan, Maytook, Syoc, Chancellor, Cavalier, Mikado, Ben Hur, Grover C, Robert I, Uno, Oliver T, 3d Belle of Antelope, 4th Belle of Antelope, Mountain Maid, Rosaly K, 2d Rosaly K, Nettie P, Patty, Ruby B, True B, 3d Rosaly K, 8th Belle of Antelope	P. Peterson	Sites.
Kirklevington Oxford Count, Belle 27th, Hattie, Flora 7th, Burnetta 7th, Gussie, Red Rose, Prince 2d, Prince 3d	P. S. Childs	Davisville

FIRST DEPARTMENT—Continued.

NAME.	Owner.	Residence.
<i>Holsteins.</i>		
Sedro, El Cuero Netherlands, Billie Taylor, Von Moltke, King of Menlo, Sedro's Thistle, Navarre, Star of Lee, Silk, Cortez, Sylpha, Thissa, Kyeless, Ontarette, Edenia, Little Minch, Pamola, Misty Morning, Bontje 2d, Aaggie Kathleen.	F. H. Burke.....	Menlo Park.
<i>Durhams.</i>		
3d Kirklevington of F. H., 5th Kirklevington of F. H., 26th Kirklevington of F. H., 43d Kirklevington of F. H., Jessie Maynard 3d, 4th Rose of F. H., 21st Rose of F. H., Jessie Maynard 4th, Amelia 12th, Oxford Rose 11th, Nevada Belle 8th, 28th Rose of F. H., Oxford Rose 12th, Red Dolly 27th; and eleven head of Cotswold sheep.....	Coleman Younger & Son..	San José.
<i>Angora Goats.</i>		
Gov. Helm and nine of his progeny.....	T. H. Harlan.....	Williams.

SECOND DEPARTMENT.

CLASS I—MACHINERY, ENGINES, ETC.

EXHIBITOR.	Address.	Articles Exhibited.
Pacific Manufacturing Co..	San Francisco	Apparatus for raising water for irrigating purposes.
Pacific Manufacturing Co..	San Francisco	Well pump.
Stanton, Thomson & Co....	Sacramento	Well pump.
Stanton, Thomson & Co....	Sacramento	Machine for manufacturing field and garden fence.
Pacific Manufacturing Co..	San Francisco	Rotary pump for irrigating purposes.
Root, Neilson & Co.....	Sacramento	Apparatus for raising water for irrigating purposes.
Root, Neilson & Co.....	Sacramento	College City pump and horse-power combined.
Huntington, Hopkins & Co.	Sacramento	Saw gunner.
F. A. Huntington.....	San Francisco	Model centrifugal roller quartz mill.
Park & Lacy.....	San Francisco	Westinghouse steam engine, fifteen horse-power (imported).
George W. Topping.....	Sacramento	Well pump.
Wm. Gutenberg.....	Sacramento	Apparatus for raising water for irrigating or mining purposes.
Pacific Saw Mfg Co.....	San Francisco	Saw gunner.
George W. Topping.....	Sacramento	Steam engine, two horse-power, California manufacture.
William Gutenberg.....	Sacramento	Well pump.

SECOND DEPARTMENT—Continued.

CLASS II—AGRICULTURAL MACHINES.

EXHIBITOR.	Address.	Articles Exhibited.
S. C. H. Agricultural W'ks.	Stockton	Hay press.
Stanton, Thomson & Co.	Sacramento	Cider mill and press.
Stanton, Thomson & Co.	Sacramento	Horse hay rake.
Stanton, Thomson & Co.	Sacramento	Hay and straw cutter.
Stanton, Thomson & Co.	Sacramento	Lawn mower.
A. & A. Heilbron	Sacramento	Horse hay rake.
A. & A. Heilbron	Sacramento	Hay and straw cutter.
A. & A. Heilbron	Sacramento	Lawn mower.
Truman, Hooker & Co.	San Francisco	Horse hay rake.
Baker & Hamilton	Sacramento	Thrashing machine.
Baker & Hamilton	Sacramento	Cider mill and press.
Baker & Hamilton	Sacramento	Horse hay rake, Tiger.
Baker & Hamilton	Sacramento	Hay and straw cutter.
Baker & Hamilton	Sacramento	Power corn sheller.
Baker & Hamilton	Sacramento	Hand corn sheller.
Baker & Hamilton	Sacramento	Lawn mower.
Benicia Agricultural W'ks.	Benicia	Display of agricultural machinery by any one house, California manufacture.
Benicia Agricultural W'ks.	Benicia	Sweep horse-power.
G. G. Wickson & Co.	San Francisco	Hay and straw cutter.
Minnesota Thresher Mfg Co.	Oakland	Thrashing machine.

CLASS III—AGRICULTURAL MACHINES.

EXHIBITOR.	Address.	Articles Exhibited.
J. H. Stevens	Sacramento	Harrow.
S. C. H. Agricultural W'ks.	Stockton	Combined header and thrasher.
Theodore Palm	Sacramento	Derrick for stacking grain.
Holt Bros.	Stockton	Combined header and thrasher.
Stanton, Thomson & Co.	Sacramento	Grain broadcast sowing machine.
Stanton, Thomson & Co.	Sacramento	Mowing machine.
Stanton, Thomson & Co.	Sacramento	Self-binding harvester.
Stanton, Thomson & Co.	Sacramento	Hay pitching machine.
Stanton, Thomson & Co.	Sacramento	Corn planter, hand power.
Stanton, Thomson & Co.	Sacramento	Harrow.
Stanton, Thomson & Co.	Sacramento	One-horse cultivator.
Stanton, Thomson & Co.	Sacramento	Cultivator.
Stanton, Thomson & Co.	Sacramento	Disk harrow.
A. B. Brentner	Fresno	Flexible harrow.
Burge & Donahoo	San Francisco	Harrow.
A. & A. Heilbron	Sacramento	Grain broadcast sowing machine.
A. & A. Heilbron	Sacramento	Mowing machine.
A. & A. Heilbron	Sacramento	Display of reaping and mowing machine knives.
A. & A. Heilbron	Sacramento	Self-binding harvester.
A. & A. Heilbron	Sacramento	Harrow.
A. & A. Heilbron	Sacramento	One-horse cultivator.
A. & A. Heilbron	Sacramento	Cultivator.
A. & A. Heilbron	Sacramento	Horse hoe.
Truman, Hooker & Co.	San Francisco	Harrow.
Truman, Hooker & Co.	San Francisco	One-horse cultivator.
Truman, Hooker & Co.	San Francisco	Cultivator.
Baker & Hamilton	Sacramento	Lifter for header.
Baker & Hamilton	Sacramento	Mowing machine.
Baker & Hamilton	Sacramento	Combined reaper and mower.
Baker & Hamilton	Sacramento	Hand corn sheller.
Baker & Hamilton	Sacramento	Potato planter.
Baker & Hamilton	Sacramento	One-horse cultivator.
Baker & Hamilton	Sacramento	Harrow.
Baker & Hamilton	Sacramento	Cultivator.
Baker & Hamilton	Sacramento	Horse hoe.
Baker & Hamilton	Sacramento	Double shovel plow.
Benicia Agricultural W'ks.	Benicia	Grain broadcast sowing machine.
Benicia Agricultural W'ks.	Benicia	Harrow.

SECOND DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.
Benicia Agricultural W'ks.	Benicia	One-horse cultivator.
Benicia Agricultural W'ks.	Benicia	Cultivator.
Benicia Agricultural W'ks.	Benicia	Horse hoe.
William Gutenberger	Sacramento	Field roller and crusher.
Baker & Hamilton	Sacramento	Grain broadcast sowing machine.
Bull & Grant	Sacramento	Acme harrow.
Minnesota Thresher Mfg Co.	Oakland	Self-feeder for thrashing machine.
Truman, Hooker & Co.	San Francisco	Grain broadcast sowing machine.
Truman, Hooker & Co.	San Francisco	Wheat drill.

CLASS IV—AGRICULTURAL MACHINES.

EXHIBITOR.	Address.	Articles Exhibited.
John Donnelly	San Mateo	Farm gate.
John Klees	Sacramento	Fanning mill.
John Klees	Sacramento	Grain cleaner (Independent).
A. T. Ames	Galt	Windmill.
Pacific Manufacturing Co.	San Francisco	Windmill.
Henry Goossen	Cordelia	Farm gate.
Stanton, Thomson & Co.	Sacramento	Windmill.
W. O. Pierce	Sacramento	Model farm gate.
S. C. H. Agricultural W'ks.	Stockton	Grain cleaner (Independent).
S. C. H. Agricultural W'ks.	Stockton	Grain cleaning attachment for thrasher.
C. J. Long	Williams	Model farm gate.
Baker & Hamilton	Sacramento	Grain cleaning attachment for thrasher.
Benicia Agricultural W'ks.	Benicia	Farm feed mill.
G. G. Wickson & Co.	San Francisco	Farm feed mill.
G. G. Wickson & Co.	San Francisco	Beehive, without bees.
G. G. Wickson & Co.	San Francisco	Agricultural boiler.

CLASS V—TOOLS AND HOUSEHOLD IMPLEMENTS.

EXHIBITOR.	Address.	Articles Exhibited.
Stanton, Thomson & Co.	Sacramento	Display of haying and harvesting tools.
Stanton, Thomson & Co.	Sacramento	Farm road scraper.
Stanton, Thomson & Co.	Sacramento	Garden seed drill.
Stanton, Thomson & Co.	Sacramento	Washing machine.
Huntington, Hopkins & Co.	Sacramento	Cabbage cutter.
Huntington, Hopkins & Co.	Sacramento	Pruning knives.
Huntington, Hopkins & Co.	Sacramento	Pruning shears.
Huntington, Hopkins & Co.	Sacramento	Sausage-meat cutter and stuffer.
A. S. Hopkins & Bro.	Sacramento	Churn.
A. S. Hopkins & Bro.	Sacramento	Butter worker.
A. S. Hopkins & Bro.	Sacramento	Washing machine.
A. S. Hopkins & Bro.	Sacramento	Clothes wringer.
A. S. Hopkins & Bro.	Sacramento	Clothes horse to occupy least space.
James Linforth	San Francisco	Zimmerman's fruit evaporator or drier.
A. & A. Heilbron	Sacramento	Display of haying and harvesting tools.
A. & A. Heilbron	Sacramento	Farm road scraper.
Benicia Agricultural W'ks.	Benicia	Farm road scraper.
Pacific Saw Mfg Co.	San Francisco	Pruning shears.
Pacific Saw Mfg Co.	San Francisco	Pruning knives.
Baker & Hamilton	Sacramento	Display of haying and harvesting tools.
Baker & Hamilton	Sacramento	Garden seed drill.
E. W. Melvin	Sacramento	Newbecker washing machine.
E. W. Melvin	Sacramento	Empire clothes wringer.
G. G. Wickson & Co.	San Francisco	Churn.
G. G. Wickson & Co.	San Francisco	Butter worker.
G. G. Wickson & Co.	San Francisco	Cheese vat with heater attached.
G. G. Wickson & Co.	San Francisco	Display of dairy machinery.
G. G. Wickson & Co.	San Francisco	Cheese press.
G. G. Wickson & Co.	San Francisco	Washing machine.

SECOND DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.
G. G. Wickson & Co.	San Francisco	Milk cooler.
Bull & Grant	Sacramento	Farm road scraper.
W. H. Murray	San Francisco	Harvey's hot water and steam radiators.
P. R. and Holstein Dairy Co.	Point Reyes	Churn.
P. R. and Holstein Dairy Co.	Point Reyes	Butter worker.
P. R. and Holstein Dairy Co.	Point Reyes	Display of dairy machinery.

CLASS VI—PLOWS.

EXHIBITOR.	Address.	Articles Exhibited.
G. W. Hains	Stockton	Gang plow.
Stanton, Thomson & Co.	Sacramento	Gang plow.
Stanton, Thomson & Co.	Sacramento	Sulky plow.
Stanton, Thomson & Co.	Sacramento	Stubble plow.
Stanton, Thomson & Co.	Sacramento	Sod plow.
Stanton, Thomson & Co.	Sacramento	Steel plow.
Stanton, Thomson & Co.	Sacramento	Cast-iron plow.
Stanton, Thomson & Co.	Sacramento	Sidehill plow.
Stanton, Thomson & Co.	Sacramento	One-horse plow.
Stanton, Thomson & Co.	Sacramento	Dynamometer.
Stanton, Thomson & Co.	Sacramento	Chilled plow.
Stanton, Thomson & Co.	Sacramento	Plow for all purposes.
Stanton, Thomson & Co.	Sacramento	Vineyard plow.
S. C. H. Agricultural W'ks.	Stockton	Curved standard bench beam gang plow.
G. W. Hains	Stockton	Sulky plow.
Burge & Donahoo	San Francisco	Gang plow.
Burge & Donahoo	San Francisco	Sulky plow.
Burge & Donahoo	San Francisco	One-horse plow.
Burge & Donahoo	San Francisco	Road plow.
Burge & Donahoo	San Francisco	Steel plow.
Burge & Donahoo	San Francisco	Single wheel stubble plow.
A. & A. Heilbron	Sacramento	Gang plow.
A. & A. Heilbron	Sacramento	Sulky plow.
A. & A. Heilbron	Sacramento	Stubble plow.
A. & A. Heilbron	Sacramento	Sod plow.
A. & A. Heilbron	Sacramento	Steel plow.
A. & A. Heilbron	Sacramento	Cast-iron plow.
A. & A. Heilbron	Sacramento	One-horse plow.
A. & A. Heilbron	Sacramento	Chilled plow.
A. & A. Heilbron	Sacramento	Plow for all purposes.
A. & A. Heilbron	Sacramento	Vineyard plow.
Truman, Hooker & Co.	San Francisco	Gang plow.
Truman, Hooker & Co.	San Francisco	Sulky plow.
Truman, Hooker & Co.	San Francisco	Stubble plow.
Truman, Hooker & Co.	San Francisco	Sod plow.
Truman, Hooker & Co.	San Francisco	Steel plow.
Truman, Hooker & Co.	San Francisco	Subsoil plow.
Truman, Hooker & Co.	San Francisco	One-horse plow.
Truman, Hooker & Co.	San Francisco	Plow for all purposes.
Truman, Hooker & Co.	San Francisco	Vineyard plow.
Benicia Agricultural W'ks.	Benicia	Gang plow.
Benicia Agricultural W'ks.	Benicia	Sulky plow.
Benicia Agricultural W'ks.	Benicia	Stubble plow.
Benicia Agricultural W'ks.	Benicia	Sod plow.
Benicia Agricultural W'ks.	Benicia	Steel plow.
Benicia Agricultural W'ks.	Benicia	Subsoil plow.
Benicia Agricultural W'ks.	Benicia	Sidehill plow.
Benicia Agricultural W'ks.	Benicia	One-horse plow.
Benicia Agricultural W'ks.	Benicia	Plow for all purposes.
Benicia Agricultural W'ks.	Benicia	Vineyard plow.
Baker & Hamilton	Sacramento	Stubble plow.
Baker & Hamilton	Sacramento	Sod plow.
Baker & Hamilton	Sacramento	Steel plow.
Baker & Hamilton	Sacramento	Cast-iron plow.
Baker & Hamilton	Sacramento	Sidehill plow.
Baker & Hamilton	Sacramento	One-horse plow.

SECOND DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.
Baker & Hamilton	Sacramento	Chilled plow.
Baker & Hamilton	Sacramento	Plow for all purposes.
Baker & Hamilton	Sacramento	Vineyard plow.

CLASS VII—VEHICLES.

EXHIBITOR.	Address.	Articles Exhibited.
J. W. Wilson	Sacramento	Closed family carriage.
W. E. Shaw	San Francisco	Pleasure cart.
W. E. Shaw	San Francisco	Track sulky.
Stanton, Thomson & Co.	Sacramento	Open family carriage.
Stanton, Thomson & Co.	Sacramento	Top buggy.
Stanton, Thomson & Co.	Sacramento	Open buggy.
Stanton, Thomson & Co.	Sacramento	Farm wagon for general purposes.
Stanton, Thomson & Co.	Sacramento	Ladies' phaeton.
A. Meister	Sacramento	Open family carriage.
A. Meister	Sacramento	Top buggy.
A. Meister	Sacramento	Open buggy.
A. Meister	Sacramento	Pleasure cart.
A. Meister	Sacramento	Ladies' phaeton.
A. Meister	Sacramento	Two-seated open wagon.
A. Meister	Sacramento	Trotting wagon.
Charles Ott, Jr.	Sacramento	Spring market wagon.
Charles Ott, Jr.	Sacramento	Business wagon.
Elijah Hickman	Red Bluff	Farm wagon for general purposes.
J. F. Hill, Jr.	Sacramento	Exhibition of California grown wood.
J. Sovereign	Woodland	Breaking cart.
J. Jepsen	Sacramento	Closed family carriage.
J. Jepsen	Sacramento	Top buggy.
J. Jepsen	Sacramento	Two-seated open buggy.
J. Jepsen	Sacramento	Ladies' phaeton.
Chris. Nielsen	Sacramento	Top buggy.
Chris. Nielsen	Sacramento	Ladies' phaeton.
Chris. Nielsen	Sacramento	Business wagon.
Chris. Nielsen	Sacramento	Open buggy.
A. & A. Heilbron	Sacramento	Farm wagon for general purposes.
Baker & Hamilton	Sacramento	Farm wagon for general purposes.
Benicia Agricultural Wk's.	Benicia	Two-seated open wagon.
Benicia Agricultural Wk's.	Benicia	Farm wagon for general purposes.
A. Meister	Sacramento	Spring market wagon.
A. Meister	Sacramento	Business wagon.
Studebaker Bros.	Sacramento	Open family carriage.
Studebaker Bros.	Sacramento	Top buggy.
Studebaker Bros.	Sacramento	Two-seated open wagon.
Studebaker Bros.	Sacramento	Pleasure cart.
Studebaker Bros.	Sacramento	Breaking cart.
Studebaker Bros.	Sacramento	Ladies' phaeton.
Studebaker Bros.	Sacramento	Carriage or cab for children.
Studebaker Bros.	Sacramento	Assortment of carriage material and trimmings.
Truman & Hooker	San Francisco	Track sulky.

GOLD MEDAL ENTRIES—MACHINERY, IMPLEMENTS, ETC.

EXHIBITOR.	Address.	Articles Exhibited.
Studebaker Bros.	Sacramento	Carriages, vehicles, trimmings, etc.
A. Meister	Sacramento	Vehicles.
A. & A. Heilbron	Sacramento	Agri-cultural machinery, vehicles, plows, etc.
Stanton, Thomson & Co.	Sacramento	Agri-cultural machinery, vehicles, plows, etc.

SECOND DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.
S. C. H. Agricultural W'ks.	Stockton	Combined header and thrasher, plow cleaners, and patent shoe.
Benicia Agricultural W'ks.	Benicia	Combined header and thrasher, agricultural machinery, plows, vehicles, etc.
G. G. Wickson & Co.	San Francisco	Agricultural machinery, and display of dairy machinery, etc.
Pacific Manufacturing Co..	Sacramento	Pumps and windmills.
W. E. Shaw	San Francisco	Vehicles.
Truman, Hooker & Co.	San Francisco	Agricultural machinery, vehicles, plows, etc.

THIRD DEPARTMENT.

CLASS I—CLOTHING AND KINDRED TEXTURES.

EXHIBITOR.	Address.	Articles Exhibited.
F. H. Coffman	Sacramento	Twenty-five yards rag carpet.
David Crise	Escondido	Display of burlap rugs, home made.
D. H. Quinn	Sacramento	Display of hats and caps.
D. H. Quinn	Sacramento	Best silk hat.
D. H. Quinn	Sacramento	Best soft hat.
Mrs. M. H. Ober	San Francisco	Ladies' shoulder braces and corsets.
Ingram & Bird	Sacramento	Exhibition of carpets and rugs.
Ingram & Bird	Sacramento	Best fifteen yards woolen carpets.
Ingram & Bird	Sacramento	Best Turkish rug.
California Cotton Mills ..	East Oakland	Best display of towels and table cloth.
California Cotton Mills ..	East Oakland	Ten pounds dressed flax.
California Cotton Mills ..	East Oakland	Ten yards cotton duck and toweling.
California Cotton Mills ..	East Oakland	Linen sack twine.
California Cotton Mills ..	East Oakland	Ten yards kersey.
Chas. M. Campbell	Sacramento	Exhibits of carpets and rugs.
Chas. M. Campbell	Sacramento	Fifteen yards woolen carpet.
Chas. M. Campbell	Sacramento	Double carpet coverlet.
Weinstock & Lubin	Sacramento	Mackinac blanket.
Weinstock & Lubin	Sacramento	Display of dry goods.
Golden Gate Woolen Mills.	San Francisco	Mackinac blanket.
Christy & Wise	San Francisco	Samples of California wools.

CLASS II—NEEDLE, SHELL, AND WAXWORK.

EXHIBITOR.	Address.	Articles Exhibited.
Mrs. J. L. Brown	Sacramento	Two embroidered velvet banners.
Miss Lizzie F. Mund	Sacramento	One embroidered table scarf (two ends).
Mrs. Clara Spooner	Ash Valley	One embroidered piano scarf (two ends).
Miss Ida M. Isaacs	Sacramento	One embroidered sofa pillow and one embroidered handkerchief.
Miss Ida M. Isaacs	Sacramento	One embroidered table scarf (raised work).
Miss Ida M. Isaacs	Sacramento	One child's crochet set.
Miss Ida M. Isaacs	Sacramento	One embroidered lambrequin.
Miss Ida M. Isaacs	Sacramento	One embroidered table cover.
Mrs. S. M. Leichter	Sacramento	One embroidered chenille sofa pillow.
Mrs. Dr. W. R. Cluness	Sacramento	One embroidered table cover.
Mrs. Dr. W. R. Cluness	Sacramento	One silk quilt.

THIRD DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.
Mrs. J. H. Rothwell.....	Sacramento.....	One needlework picture.
Mrs. J. C. Jacka.....	Sacramento.....	One embroidered shawl.
Mrs. J. C. Jacka.....	Sacramento.....	One sofa pillow.
Mrs. J. C. Jacka.....	Sacramento.....	Three pieces Indian embroidery.
Mrs. J. C. Jacka.....	Sacramento.....	Five pieces point lace.
Miss Loretta Bohl.....	Sacramento.....	One embroidered table cover.
Miss Loretta Bohl.....	Sacramento.....	One handkerchief case.
Miss Loretta Bohl.....	Sacramento.....	One embroidered skirt.
Miss Loretta Bohl.....	Sacramento.....	Two pieces crochet.
Miss Loretta Bohl.....	Sacramento.....	One etched tidy.
Miss Loretta Bohl.....	Sacramento.....	One embroidered traveling satchel.
Miss Loretta Bohl.....	Sacramento.....	One sofa cushion slumber.
Miss Hattie M. Houston.....	Courtland.....	Twelve pieces variety porcelain painting.
Miss Hattie M. Houston.....	Courtland.....	Display of decorative painting on bolting cloth.
Mrs. J. G. Jackson.....	San Francisco.....	One crochet shawl.
Mrs. J. G. Jackson.....	San Francisco.....	One crochet skirt.
Mrs. J. G. Jackson.....	San Francisco.....	One crochet bead bag.
Mrs. J. G. Jackson.....	San Francisco.....	One crochet apron.
Mrs. J. G. Jackson.....	San Francisco.....	Seven crochet tidies.
Mrs. J. G. Jackson.....	San Francisco.....	Three crochet cord bags.
Mrs. J. G. Jackson.....	San Francisco.....	Three embroidered cord bags.
Mrs. Horace Adams.....	Oakland.....	Four embroidered infants' shawls.
Mrs. Horace Adams.....	Oakland.....	One embroidered infant's dress.
Mrs. Horace Adams.....	Oakland.....	One embroidered child's skirt.
Mrs. Hattie Gardiner.....	Pleasant Valley.....	Two beadwork purses.
Mrs. Hattie Gardiner.....	Pleasant Valley.....	One crochet shawl.
Mrs. Hattie Gardiner.....	Pleasant Valley.....	One child's afghan.
Mrs. Hattie Gardiner.....	Pleasant Valley.....	One lounge afghan.
Mrs. Hattie Gardiner.....	Pleasant Valley.....	Thirteen varieties ornamented grasses.
Mrs. Hattie Gardiner.....	Pleasant Valley.....	Display of paper flowers.
Mrs. Hattie Gardiner.....	Pleasant Valley.....	One sofa pillow.
Mrs. Hattie Gardiner.....	Pleasant Valley.....	Six pieces outlined embroidery.
Miss Susie V. Staples.....	El Dorado.....	Six pieces point and honiton lace.
Miss Susie V. Staples.....	El Dorado.....	Two handkerchiefs, point lace.
Miss Susie V. Staples.....	El Dorado.....	Three handkerchiefs, honiton lace.
Miss Susie V. Staples.....	El Dorado.....	One barbed honiton lace.
Miss Susie V. Staples.....	El Dorado.....	One collar, honiton and point lace.
Miss Susie V. Staples.....	El Dorado.....	One long piece honiton lace.
Miss Susie V. Staples.....	El Dorado.....	One skirt, honiton lace.
Miss Susie V. Staples.....	El Dorado.....	One butterfly, honiton lace.
Miss Susie V. Staples.....	El Dorado.....	Two pieces point applique lace.
Miss Susie V. Staples.....	El Dorado.....	Two handkerchiefs, Spanish drawn work.
Miss Susie V. Staples.....	El Dorado.....	One pair drawers, Spanish drawn work.
Miss Susie V. Staples.....	El Dorado.....	One chemise, Spanish drawn work.
Miss Susie V. Staples.....	El Dorado.....	Cotton embroidery, one skirt, two pair drawers.
Mrs. Mary Strub.....	Sacramento.....	Two frames of shellwork.
Mrs. Mary Strub.....	Sacramento.....	One small table (shellwork).
Mrs. R. S. Frazee.....	Sacramento.....	One crochet afghan.
Mrs. R. S. Frazee.....	Sacramento.....	Two crochet child's dresses.
Mrs. R. S. Frazee.....	Sacramento.....	Two crochet tidies.
Mrs. R. S. Frazee.....	Sacramento.....	Four pairs crochet pillow cases.
Mrs. R. S. Frazee.....	Sacramento.....	One crochet child's collar.
Mrs. R. S. Frazee.....	Sacramento.....	One crochet lady's skirt.
Mrs. R. S. Frazee.....	Sacramento.....	One pair crochet window shades.
Mrs. R. S. Frazee.....	Sacramento.....	One crochet apron.
Mrs. R. S. Frazee.....	Sacramento.....	One card of samples of crochet work.
Miss Rosa Baumle.....	Sacramento.....	One crazy patchwork quilt.
Miss Rosa Baumle.....	Sacramento.....	One sofa cushion.
Mrs. Cushing.....	Sacramento.....	One crazy patchwork quilt.
Mrs. Cushing.....	Sacramento.....	Two pillow shams.
Mrs. S. M. Leichter.....	Sacramento.....	Display of shells and corals.
Mrs. M. E. Osgood.....	Sacramento.....	Three patchwork quilts.
Mrs. A. M. Fish.....	Sacramento.....	Three pieces Kensington embroidery, with crewel in wool.
Mrs. A. M. Fish.....	Sacramento.....	One child's afghan.
Mrs. A. M. Fish.....	Sacramento.....	One needlework picture.
Mrs. A. M. Fish.....	Sacramento.....	One lamp mat.
Mrs. A. M. Fish.....	Sacramento.....	Three knit skirts.

THIRD DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.
Miss Sophia Conrad	Sacramento	One crochet bedspread.
Miss Sophia Conrad	Sacramento	One knit bedspread.
Miss Sophia Conrad	Sacramento	Three pieces of hand sewing.
Mrs. Chas. Robin	Sacramento	One embroidered piano cover.
Mrs. Chas. Robin	Sacramento	One embroidered table scarf.
Mrs. Chas. Robin	Sacramento	One embroidered table scarf.
Mrs. Chas. Robin	Sacramento	Two emb'd toilet sets (six pieces each).
Mrs. Chas. Robin	Sacramento	One knitted worsted skirt.
Mrs. M. E. Tryon	Sacramento	One embroidered bed quilt.
Mrs. M. E. Tryon	Sacramento	One crazy patchwork quilt.
Geo. M. Purnell	Sacramento	One embroidered chair seat and back.
Geo. M. Purnell	Sacramento	One embroidered silk quilt.
Geo. M. Purnell	Sacramento	One patchwork quilt.
Geo. M. Purnell	Sacramento	One piece of raised wool work.
Mrs. Ida Brannen	Vacaville	One piece of chenille embroidery.
Mrs. Ida Brannen	Vacaville	One piece of raised chenille embroidery.
Mrs. J. W. Cotton	Dixon	One embroidered wall panel.
Mrs. J. W. Cotton	Dixon	One embroidered banner (arrasene work).
Mrs. J. W. Cotton	Dixon	One scarf (applique work).
Mrs. Theo. Deming	Sacramento	One sofa pillow (Kensington).
Mrs. Theo. Deming	Sacramento	One embroidered fire screen.
Theo. Deming	Sacramento	One sofa pillow, in Kensington.
Theo. Deming	Sacramento	One embroidered fire screen.
Theo. Deming	Sacramento	One pair paddles, Kensington work.
Theo. Deming	Sacramento	One table scarf, Kensington work.
Theo. Deming	Sacramento	One pair knit mittens.
Miss S. Pearson	Sacramento	One knit bedspread.
Mrs. W. C. Brown	Sacramento	One braided pillow scarf.
Mrs. W. C. Brown	Sacramento	One pair braided pillow shams.
Misses C. and M. Brothers	Sacramento	Display of millinery.
Misses C. and M. Brothers	Sacramento	Velvet bonnet.
Misses C. and M. Brothers	Sacramento	Velvet hat.
Misses C. and M. Brothers	Sacramento	Silk bonnet.
Misses C. and M. Brothers	Sacramento	Display of feathers.
Misses C. and M. Brothers	Sacramento	Varieties of artificial flowers.
Miss A. L. Chandler	Nicolaus	One lounge afghan.
Miss A. L. Chandler	Nicolaus	One embroidered table cover.
Miss A. L. Chandler	Nicolaus	Two embroidered table scarfs.
Miss A. L. Chandler	Nicolaus	One embroidered sofa pillow, two designs.
Miss A. L. Chandler	Nicolaus	One sofa pillow, two designs.
Miss A. L. Chandler	Nicolaus	Three embroidered banners.
Miss A. L. Chandler	Nicolaus	One embroidered drape.
Miss A. L. Chandler	Nicolaus	One embroidered picture frame.
Miss A. L. Chandler	Nicolaus	Embroidered picture (Knight and Lady).
Miss A. L. Chandler	Nicolaus	One embroidered toilet set of cushions and two bottles.
Miss A. L. Chandler	Nicolaus	Three embroidered mats and scarfs.
Miss A. L. Chandler	Nicolaus	One pair pillow shams.
Mrs. J. Corbin	Michigan Bar	One patchwork star quilt.
Mrs. W. H. Wright	Sacramento	One embroidered wall paddle.
Mrs. W. H. Wright	Sacramento	One embroidered table cover.
Mrs. W. H. Wright	Sacramento	One embroidered sofa pillow.
Mrs. W. H. Wright	Sacramento	One pair knit socks,
Mrs. W. H. Wright	Sacramento	one pair stockings, one pair mittens.
Mrs. C. A. Patrick	Sacramento	Display of children's clothing.
Mrs. C. A. Patrick	Sacramento	One baby's flannel skirt.
Mrs. C. A. Patrick	Sacramento	Two babies' wool hoods.
Mrs. C. A. Patrick	Sacramento	One baby's wool skirt (crochet).
Mrs. C. A. Patrick	Sacramento	Two infants' lawn dresses.
Mrs. C. A. Patrick	Sacramento	One baby skirt dress, hand made lace.
Mrs. C. A. Patrick	Sacramento	Two infants' night dresses.
Mrs. C. A. Patrick	Sacramento	Three little girls' trimmed dresses.
Mrs. C. A. Patrick	Sacramento	One child's skirt.
Mrs. C. A. Patrick	Sacramento	Two ladies' skirts, crochet trimming.
Mrs. C. A. Patrick	Sacramento	One set ladies' underwear (nightgown, chemise, drawers, and corset covers).
Mrs. C. A. Patrick	Sacramento	Three children's aprons.
Mrs. C. A. Patrick	Sacramento	One girl's dress.
Mrs. C. A. Patrick	Sacramento	One chemise and drawers, lace trimmed.
Mrs. C. A. Patrick	Sacramento	Two hand made chemise, lace trimmed.

THIRD DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.
Mrs. C. A. Patrick	Sacramento	Two children's guimpes.
Mrs. C. A. Patrick	Sacramento	One plush embroidered tidy.
Mrs. C. A. Patrick	Sacramento	Two nightgowns.
McKim & Orth	Sacramento	Stocking yarn.
McKim & Orth	Sacramento	Display of fancy goods.
McKim & Orth	Sacramento	Children's clothing, California made.
McKim & Orth	Sacramento	Embroidered handkerchief.
McKim & Orth	Sacramento	Silk embroidery on flannel.
McKim & Orth	Sacramento	Display of lace made by hand, not less than five pieces.
McKim & Orth	Sacramento	Crochet shawl.
McKim & Orth	Sacramento	Crochet cape.
Mrs. George Muddox	Sacramento	Two crochet bedspreads.
Mrs. W. M. Lyon	Sacramento	One piece Kensington embroidery.
Mrs. W. M. Lyon	Sacramento	One painting on bolting cloth.
Mrs. W. M. Lyon	Sacramento	Surface plush painting.
Mrs. W. M. Lyon	Sacramento	Bead work.
Mrs. W. M. Lyon	Sacramento	Kensington painting.
Mrs. W. M. Lyon	Sacramento	Piece of raised silk work.
Mrs. W. M. Lyon	Sacramento	Three pieces of painting on ivory.
Mrs. W. M. Lyon	Sacramento	One mussel set (thirteen pieces).
Mrs. W. M. Lyon	Sacramento	Twelve dinner plates.
Mrs. W. M. Lyon	Sacramento	One salad set (seven pieces).
Mrs. W. M. Lyon	Sacramento	One chocolate set (twenty-five pieces).
Mrs. W. M. Lyon	Sacramento	Six cake plates.
Mrs. W. M. Lyon	Sacramento	Six tea plates.
Mrs. W. M. Lyon	Sacramento	Three fancy plaques.
Mrs. W. M. Lyon	Sacramento	One mush bowl and plate.
Mrs. W. M. Lyon	Sacramento	Six afterdinner cups and saucers.
Mrs. Mary Miller	Dixon	Two fancy plaques.
Mrs. Mary Miller	Dixon	Six painted vases.
Miss Mary E. Miller	Dixon	Largest display and best variety of porcelain painting (sixty-six pieces).
Mrs. Hugh Casey	Sacramento	Two needle-worked pictures.
Mrs. Hugh Casey	Sacramento	One embroidered needle-worked picture on silk.
Mrs. Ravena	San Francisco	Best bead work (by hand).
McKim & Orth	Sacramento	Best silk hosiery.
Mrs. O. Summers	Sacramento	Two embroidered pillow shams.
Mrs. O. Summers	Sacramento	One embroidered sheet sham.
Mrs. O. Summers	Sacramento	One embroidered table cloth.
Mrs. O. Summers	Sacramento	Two embroidered aprons.
Miss Eda Mohr	Sacramento	One embroidered table scarf (two ends).
Miss Eda Mohr	Sacramento	Largest display of Turkish embroidery.
Miss Eda Mohr	Sacramento	Raised silk work.
Miss Eda Mohr	Sacramento	Spanish drawn work.
Mrs. Agnes Hummel	Sacramento	Embroidered handkerchief.
Mrs. Agnes Hummel	Sacramento	Embroidery on flannel.
Mrs. Addie Carter	Sacramento	Embroidered toilet set.
Mrs. Addie Carter	Sacramento	Wax flowers.
Mrs. Addie Carter	Sacramento	Skeleton leaves.
Mrs. Addie Carter	Sacramento	One embroidered infant's robe.
Mrs. A. Bonheim	Sacramento	One patchwork quilt.
Weinstock & Lubin	Sacramento	Display of millinery.
Weinstock & Lubin	Sacramento	Velvet bonnet.
Weinstock & Lubin	Sacramento	Silk bonnet.
Mrs. Dr. F. W. Hatch	Sacramento	Twelve embroidered dollies or doilies.
Mrs. Agnes Hummel	Sacramento	Two painted panels.
Miss Maggie O'Toole	Freeport	One painting on velvet.
Miss Sarah Stayback	Sacramento	One plaque on velvet.
Mrs. E. W. Norris	Sacramento	Embroidered table scarf (two ends).
Mrs. E. W. Norris	Sacramento	One embroidered fire screen.
Mrs. E. W. Norris	Sacramento	One embroidered sofa pillow and cushion.
Mrs. E. W. Norris	Sacramento	One embroidered wall panel.
Mrs. E. W. Norris	Sacramento	One embroidered wall banner.
Mrs. E. W. Norris	Sacramento	One embroidery on flannel.
Mrs. E. W. Norris	Sacramento	One chenille.
Mrs. E. W. Norris	Sacramento	One arrasene.
Mrs. E. W. Norris	Sacramento	One plush ribbon work.
Mrs. E. W. Norris	Sacramento	Needlework picture.

THIRD DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.
Mrs. E. W. Norris	Sacramento	Best, largest, and handsomest display of articles made by lady.
Mrs. E. W. Norris	Sacramento	One tray embroidered pincushion.
Mrs. E. W. Norris	Sacramento	One pair embroidered palettes.
Mrs. E. W. Norris	Sacramento	One pair embroidered sachet bags.
Mrs. E. W. Norris	Sacramento	One pair embroidered table scarfs.
Mrs. E. W. Norris	Sacramento	One embroidered toilet cushion.
Mrs. E. W. Norris	Sacramento	One embroidered flannel skirt.
Mrs. E. W. Norris	Sacramento	One embroidered blotter.
Mrs. E. W. Norris	Sacramento	One embroidered banner (raised work).
Mrs. E. W. Norris	Sacramento	One embroidered wall panel.
Mrs. E. W. Norris	Sacramento	One embroidered dressed face.
Mrs. E. W. Norris	Sacramento	One embroidered panel.
Mrs. E. W. Norris	Sacramento	One embroidered column.
Mrs. E. W. Norris	Sacramento	One embroidered lambrequin and drapery.
Mrs. E. W. Norris	Sacramento	One pair embroidered calla lilies.
Miss Hattie Gardiner	Pleasant Valley	Two embroidered slumber rolls.
Miss Hattie Gardiner	Pleasant Valley	One pair crochet slippers.
Miss Hattie Gardiner	Pleasant Valley	One crazy patchwork table scarf.
Miss Hattie Gardiner	Pleasant Valley	Two ladies' crochet skirts.
Miss Hattie Gardiner	Pleasant Valley	Two pieces ladies' crochet underwear.
Miss Hattie Gardiner	Pleasant Valley	One suit ladies' home-made underwear.
Miss Rosa Baumle	Sacramento	One pair etched pillow shams.
Miss Rosa Baumle	Sacramento	One sofa bag (hand painted).
Miss Rosa Baumle	Sacramento	One embroidered plaque.
Miss Rosa Baumle	Sacramento	One embroidered lambrequin.
Miss Rosa Baumle	Sacramento	Two sets rickrack.
Miss Rosa Baumle	Sacramento	One Mexican lace work apron.
Miss Rosa Baumle	Sacramento	One rickrack apron.
Miss Rosa Baumle	Sacramento	One fancy apron.
Miss Rosa Baumle	Sacramento	One Swiss apron.
Miss Rosa Baumle	Sacramento	Two pieces underwear.
Miss Carrie Davey	Sacramento	Forty-one patterns of crochet.
Miss Carrie Davey	Sacramento	Seventeen patterns of crochet knitting.
Miss Carrie Davey	Sacramento	Five pieces crochet skirts.
Miss Carrie Davey	Sacramento	Four pieces crochet aprons.
Miss Carrie Davey	Sacramento	Three knit pillow cases.
Miss Carrie Davey	Sacramento	Two crochet pillow cases.
Miss Carrie Davey	Sacramento	One rickrack chemise.
Miss Carrie Davey	Sacramento	Three crochet chemises.
Miss Carrie Davey	Sacramento	Two sets pillow shams (etched work).
Miss Carrie Davey	Sacramento	Two sets sheets and shams (etched work).
Miss Alice Watson	Sacramento	One set of underwear, three pieces, hand made.
Miss Alice Watson	Sacramento	One ladies' embroidered skirt, with silk on flannel.
Miss Alice Watson	Sacramento	One ladies' skirt, hand lace trimming.
Miss Alice Watson	Sacramento	One silk embroidered pillow.
Miss Alice Watson	Sacramento	One Kensington embroidered pillow.
Miss Alice Watson	Sacramento	Two embroidered handkerchiefs.
Miss Alice Watson	Sacramento	Two embroidered towels.
Miss Alice Watson	Sacramento	Two pieces cotton embroidery.
Miss Alice Watson	Sacramento	One embroidered toilet set (four pieces).
Mrs. O. W. McGowan	Sacramento	One wreath of feather flowers.
Mrs. O. W. McGowan	Sacramento	One lyre of shavings flowers, made of Oregon cedar.
Mrs. O. W. McGowan	Sacramento	One hand-made shell pin and earrings, made of scales of fish.
Mrs. O. W. McGowan	Sacramento	One wreath, made of sea moss.
Mrs. F. A. Arnold	San Francisco	Two panel paintings on velvet.
Mrs. F. A. Arnold	San Francisco	One embroidered pillow, one bag, and one photo frame.
Mrs. F. A. Arnold	San Francisco	One embroidered lambrequin.
Mrs. F. A. Arnold	San Francisco	One embroidered bedspread.
Mrs. F. A. Arnold	San Francisco	Six embroidered silk pieces.
Mrs. F. A. Arnold	San Francisco	Two embroidered Turkish.
Mrs. F. A. Arnold	San Francisco	Three pieces Spanish drawn work.
Mrs. F. A. Arnold	San Francisco	One painted necktie case.
Mrs. Chas. Ott, Jr.	Sacramento	One child's dress.
Mrs. Chas. Ott, Jr.	Sacramento	Three pieces lace.

THIRD DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.
Mrs. Joseph Morehouse.....	Grass Valley	 Four knit pillow cases.
Mrs. Joseph Morehouse.....	Grass Valley	 Four knit tidies.
Mrs. Joseph Morehouse.....	Grass Valley	 Two knit lace collars.
Mrs. Joseph Morehouse.....	Grass Valley	 Twenty samples of knit lace.

SPECIAL PREMIUMS.

EXHIBITOR.	Address.	Articles Exhibited.
Miss Maggie O'Toole.....	Freeport	 One piece hand painted soup tureen.
Miss Hattie M. Houston.....	Courtland	 One piece decorative painting.
Miss Hattie M. Houston.....	Courtland	 One piece decorative painting on porcelain.
Miss S. J. Hopper.....	Sacramento	 One China plate, hand painted.
Mrs. F. A. Arnold	San Francisco	 One China fish set, hand painted.
Mrs. F. A. Arnold	San Francisco	 One China tea set, hand painted.
Miss Eda Mohr.....	Sacramento	 Best piece of embroidery work.
Miss Maggie O'Toole.....	Freeport	 Two plaques on porcelain.
Mrs. F. A. Arnold.....	San Francisco.....	 One embroidered fire screen.
Mrs. M. E. Norris	Sacramento	 For best piece on embroidery.
Mrs. H. C. Briggs	Oakland	 One decorative screen (Art Gallery).

JUVENILE DEPARTMENT.

EXHIBITOR.	Address.	Articles Exhibited.
Anna C. Herr.....	Sacramento	 Two crochet child's skirts.
Dora M. Fish, 11 years.....	Sacramento	 One hand-made calico dress.
Anna M. Fish, 12 years.....	Sacramento	 One needlework picture.
Clarence Ruggles, 10 years.....	Winters	 One frame of paper flowers.
Clarence Ruggles	Winters	 One frame of paper flowers (wreath).
Clarence Ruggles	Winters	 One frame of paper flowers (anchor).
Edna Harvey, 11 years.....	Sacramento	 One calico dress, hand made.
Edna Harvey.....	Sacramento	 One etched apron.
Edna Harvey.....	Sacramento	 One piece silk tatting.
Agnes M. Hopper, 11 years.....	Sacramento	 One calico dress.
Juanita Pommer, 13 years.....	Sacramento	 One white work dress.
Bertie Wassermann, 15 y'rs.....	Sacramento	 One fascinator.
Bertie Wassermann.....	Sacramento	 One crochet shawl.
Bertie Wassermann.....	Sacramento	 One piece of lace for apron.
Bertie Wassermann.....	Sacramento	 One pair wristlets.
Bertie Wassermann.....	Sacramento	 One knit purse.
Bertie Wassermann.....	Sacramento	 One fancy apron.
Bertie Wassermann.....	Sacramento	 One sewing apron.
Bertie Wassermann.....	Sacramento	 One pair slippers.
Daisy Wassermann.....	Sacramento	 One chemise yoke.
Daisy Wassermann.....	Sacramento	 One fancy apron.
Daisy Wassermann.....	Sacramento	 One baby sacque.
Daisy Wassermann.....	Sacramento	 One piece of lace for skirt.
Daisy Wassermann.....	Sacramento	 One crochet shawl.
Daisy Wassermann.....	Sacramento	 One purse.
Daisy Wassermann.....	Sacramento	 One fascinator.
Daisy Wassermann.....	Sacramento	 One splashier.
Daisy Wassermann.....	Sacramento	 One cushion.
Daisy Wassermann.....	Sacramento	 One pair armlets.
Daisy Wassermann.....	Sacramento	 One pair slippers.
Edna Harvey.....	Sacramento	 One silk quilt.
Ida M. Isaacs.....	Sacramento	 One embroidered sofa pillow.
Ida M. Isaacs.....	Sacramento	 One embroidered handkerchief.
Ida M. Isaacs.....	Sacramento	 One embroidered table scarf, raised work.
Ida M. Isaacs.....	Sacramento	 One child's crochet set.
Ida M. Isaacs.....	Sacramento	 One embroidered lambrequin.
Ida M. Isaacs.....	Sacramento	 One embroidered table cover.
Miss S. Jennie Hopper.....	Sacramento	 One panel of poppies and daisies, in oil.
Miss S. Jennie Hopper.....	Sacramento	 One panel autumn leaves (Kensington).

THIRD DEPARTMENT—Continued.

CLASS III—PRINTING, LITHOGRAPHING, ETC.

EXHIBITOR.	Address.	Articles Exhibited.
Geo. W. Hagans	San Francisco	Best sheet music.
W. H. Murray, agent	San Francisco	Best sheet music.
W. H. Murray, agent	San Francisco	Display of lithography and zincograph.
McCabe Lithograph Co.	San Francisco	Display of lithography and zincograph.

GOLD MEDAL ENTRIES.

EXHIBITOR.	Address.	Articles Exhibited.
Weinstock & Lubin	Sacramento	Meritorious exhibit.
Mrs. M. H. Ober	San Francisco	Meritorious display of ladies' and children's underwear.
Mrs. Hugh Casey	Sacramento	Meritorious display of needlework.
California Cotton Mills	San Francisco	Meritorious display of cotton goods.

FOURTH DEPARTMENT.

CLASS I—MANUFACTURE OF LEATHER, PAPER, AND RUBBER.

EXHIBITOR.	Address.	Articles Exhibited.
Henry Berger	Redwood City	Display of leather.
Whittier, Fuller & Co.	Sacramento	Display of paper hangings and borders.
Alvedo Meza	Sacramento	One Mexican saddle, home manufacture.
R. W. Neely	Sacramento	Display of men's boots, shoes, and gaiters.
R. W. Neely	Sacramento	One pair of heavy boots.
R. W. Neely	Sacramento	One pair of dress boots.
R. W. Neely	Sacramento	One pair of gentlemen's dress shoes.
R. W. Neely	Sacramento	One pair of gentlemen's Congress gaiters.
R. W. Neely	Sacramento	One pair of ladies' gaiters.
R. W. Neely	Sacramento	One pair of ladies' bootees.
J. Jepson & Son	Sacramento	One set single harness.
James Longshore	Sacramento	Exhibition of traveling trunks, bags, and valises.
S. P. Taylor & Co.	San Francisco	Best general display of paper (twenty-one tons), embracing white news, manilla, straw, and strawboard papers.
S. P. Taylor & Co.	San Francisco	Paper bags (Eagle brand).
T. Devlin	Arcata	Display of leather.
A. A. Van Voorhies & Co. ...	Sacramento	One set of patent harness.
A. A. Van Voorhies & Co. ...	Sacramento	One patent riding surcingle.
A. A. Van Voorhies & Co. ...	Sacramento	One pair patent interfering devices.

CLASS II—WORKED METALS.

EXHIBITOR.	Address.	Articles Exhibited.
Mrs. J. L. Baker	Sacramento	Display of kitchen utensils of tin.
C. W. Goddard	Sacramento	Display of horseshoes, hand made.
Huntington, Hopkins & Co. ...	Sacramento	Display of general hardware.
Huntington, Hopkins & Co. ...	Sacramento	Display of iron and steel.
Huntington, Hopkins & Co. ...	Sacramento	Display of blacksmithing tools.

FOURTH DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.
Huntington, Hopkins & Co.	Sacramento	Display of pocket cutlery.
Huntington, Hopkins & Co.	Sacramento	Display of circular saws.
Huntington, Hopkins & Co.	Sacramento	Display of wire goods.
Huntington, Hopkins & Co.	Sacramento	Display of copper work.
Huntington, Hopkins & Co.	Sacramento	Display of files.
Huntington, Hopkins & Co.	Sacramento	Display of brass work.
Huntington, Hopkins & Co.	Sacramento	Display of mill saws.
Huntington, Hopkins & Co.	Sacramento	Display of mechanics' tools.
Huntington, Hopkins & Co.	Sacramento	Display of horseshoes, Phoenix machine made.
Huntington, Hopkins & Co.	Sacramento	Display of butcher's supplies and goods.
A. & A. Heilbron	Sacramento	Display of modern building hardware.
J. W. Eaton	Placerville	Display of butcher's supplies and goods.
Abner Doble	San Francisco	Display of hammer designed and manufactured by J. W. Eaton.
Abner Doble	San Francisco	Best display of copper work.
Abner Doble	San Francisco	Best display of John Wright's picks.
Abner Doble	San Francisco	Best display of blacksmith tools.
Abner Doble	San Francisco	Best display of iron and steel.
Pacific Saw Mfg Co.	San Francisco	Best display of circular saws.
Boyd & Morgan	Stockton	Best display of horseshoes, hand made and finished.
Selby Lead and Smelt'g Co.	San Francisco	Exhibit of shot.
Selby Lead and Smelt'g Co.	San Francisco	Exhibit of block tin pipe.
Selby Lead and Smelt'g Co.	San Francisco	Exhibit of lead pipe.
Selby Lead and Smelt'g Co.	San Francisco	Exhibit of anti-friction metal.
T. Doyle	San Francisco	Exhibit of hoof clasp.
T. Doyle	San Francisco	Exhibit of improved beveled horseshoe nails.

CLASS III—STOVES, CASTINGS, ETC.

EXHIBITOR.	Address.	Articles Exhibited.
A. Aitken	Sacramento	One parlor grate.
B. L. Ball	Sacramento	One farm bell.
Jos. F. Fordeier	San Francisco	Ornamental statuary.
C. D. Harvey	San Francisco	Warming furnace or other apparatus.
Fred. Jantzen	San Francisco	Oil stove.

CLASS IV—MUSICAL INSTRUMENTS.

EXHIBITOR.	Address.	Articles Exhibited.
Antisell Piano Company, E. W. Melvin, agent	San Francisco	Upright piano.

CLASS V—FURNITURE.

EXHIBITOR.	Address.	Articles Exhibited.
J. D. Huffman	Lodi	Display of California woods.
F. Kuehne	Sacramento	Two side tables, inlaid wood.
Ingram & Bird	Sacramento	Set of parlor furniture.
Ingram & Bird	Sacramento	Display of upholstery.
Ingram & Bird	Sacramento	One parlor set.
Ingram & Bird	Sacramento	Six pairs portieres.
Ingram & Bird	Sacramento	Three pairs real Brussels lace curtains.
Ingram & Bird	Sacramento	Three pairs Nottingham lace curtains.
Ingram & Bird	Sacramento	Five pairs silk curtains.

FOURTH DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.
Ingram & Bird	Sacramento	Fourteen pairs fancy chains for curtains.
Ingram & Bird	Sacramento	Twelve pairs plush and brass cornice poles.
Capital Furniture Co.	Sacramento	Dressing bureau.
Capital Furniture Co.	Sacramento	Bookcase.
Capital Furniture Co.	Sacramento	Wardrobe and lounge.
Capital Furniture Co.	Sacramento	School furniture.
John Breuner	Sacramento	Sofa.
John Breuner	Sacramento	Lounge.
John Breuner	Sacramento	Office chair.
John Breuner	Sacramento	Set of parlor chairs.
John Breuner	Sacramento	Center table.
John Breuner	Sacramento	Set of parlor furniture.
John Breuner	Sacramento	Display of furniture.
John Breuner	Sacramento	Hair mattress.
John Breuner	Sacramento	Sick chair or couch.
John Breuner	Sacramento	Spring mattress.
John Breuner	Sacramento	Display of upholstery.
John Breuner	Sacramento	Display of willow furniture.
John Breuner	Sacramento	Display of furniture.
W. D. Comstock	Sacramento	Hair mattress.
W. D. Comstock	Sacramento	Spring bed.
W. D. Comstock	Sacramento	Parlor set.
Warren E. Murray	San Francisco	Best display of California woods.
Chas. M. Campbell	Sacramento	Sofa.
Chas. M. Campbell	Sacramento	Wool mattress.
Chas. M. Campbell	Sacramento	Sick chair or couch.
Chas. M. Campbell	Sacramento	Spring mattress.
Capital Furniture Co.	Sacramento	Set of bedroom furniture.
W. F. Harmon	San Francisco	Spiral spring bed.

CLASS VI—WOODENWARE.

EXHIBITOR.	Address.	Articles Exhibited.
A. S. Hopkins & Bro.	Sacramento	Display of cedarware.
A. S. Hopkins & Bro.	Sacramento	Display of pineware.
A. S. Hopkins & Bro.	Sacramento	Display of oakware.
A. S. Hopkins & Bro.	Sacramento	Display of willowware.
A. S. Hopkins & Bro.	Sacramento	Display of split wood baskets.
A. S. Hopkins & Bro.	Sacramento	Display of osier.
A. S. Hopkins & Bro.	Sacramento	Display of woodenware.
A. S. Hopkins & Bro.	Sacramento	Display of broomcorn, broom, and brushes.
A. S. Hopkins & Bro.	Sacramento	Display of assortment of hair brushes.
A. S. Hopkins & Bro.	Sacramento	Display of assortment of cooper's ware.
E. N. Hill	Sacramento	Display of inlaid table tops.
Whittier, Fuller & Co.	Sacramento	Display of window shades.
Whittier, Fuller & Co.	Sacramento	Display of gilt frames.
Theo. W. Schwamb	Sacramento	Display of gilt frames.
Theo. W. Schwamb	Sacramento	Display of samples of twist molding, of fancy molding, and scroll sawing.

CLASS VII—ELECTRICAL APPLIANCES.

EXHIBITOR.	Address.	Articles Exhibited.
I. X. L. Truss Company	San Francisco	I. X. L. truss.
C. A. Fisk	Sacramento	One electric machine.
W. C. Clark	San Francisco	Two electric generators and dynamos.
W. C. Clark	San Francisco	Four voltaic arc lamps.
W. C. Clark	San Francisco	Thirty incandescent lamps.
W. C. Clark	San Francisco	Volb meter ammeter.
Dr. A. T. Sherwood	San Francisco	Pacific electric pad truss.

TRANSACTIONS OF THE
FOURTH DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.
Dr. A. T. Sherwood	San Francisco	Duplex galvanic belt.
A. C. Shaw	San Francisco	German tellurium (astronomical).
George Topping	Sacramento	Electric light dynamo.
W. C. Clark	San Francisco	Electric machine.
W. C. Clark	San Francisco	Electrolier incandescent chandelier.

CLASS VIII—CHEMICALS.

EXHIBITOR.	Address.	Articles Exhibited.
Whittier, Fuller & Co.	Sacramento	Best Prussian blue.
Whittier, Fuller & Co.	Sacramento	Best copal varnish.
Whittier, Fuller & Co.	Sacramento	Best glue.
Whittier, Fuller & Co.	Sacramento	Best linseed oil (five gallons).
Whittier, Fuller & Co.	Sacramento	Best white lead.
Capital Soap Company	Sacramento	Best display of soap.
Capital Soap Company	Sacramento	Best display of bleaching soap.
Capital Soap Company	Sacramento	Best display of toilet soap.
Capital Soap Company	Sacramento	Best display of castile soap.
A. S. Hopkins & Bro.	Sacramento	Best writing fluid.
A. S. Hopkins & Bro.	Sacramento	Best blacking.
A. S. Hopkins & Bro.	Sacramento	Best stove polish.
A. S. Hopkins & Bro.	Sacramento	Best axle grease.
The Guittard Mfg Co.	San Francisco	Chief baking powder.
The Guittard Mfg Co.	San Francisco	Best chocolate (California manufacture).
T. W. Jackson, agent	San Francisco	Best display of potash and caustic soda.
T. W. Jackson, agent	San Francisco	Best display of insecticide potash.
Selby Smelt'g and Lead Co.	San Francisco	Best display of bluestone and copperas.
Hueter Bros. & Co.	San Francisco	Best display of copal varnish.
Hueter Bros. & Co.	San Francisco	Best general display of varnish.
John Reynolds	San Francisco	Best exhibit of general display of prussiate of potash.
C. H. Street	San Francisco	Lubricating petroleum.
Alf. R. Kelly	San Francisco	Golden West oil.
Alf. R. Kelly	San Francisco	Neal's carriage paints.
John Reynolds	San Francisco	Oil of vitriol, muriatic and nitric acid.
Madame Lee	San Francisco	Toilet soap.
Alf. R. Kelly	San Francisco	Imperishable paint.

CLASS IX—STONEWARE, ETC.

EXHIBITOR.	Address.	Articles Exhibited.
George Muddox	Sacramento	Best stoneware.
George Muddox	Sacramento	Best water pipe of water lime.
George Muddox	Sacramento	Best sample of drain tile.
George Muddox	Sacramento	Best roofing tile.
George Muddox	Sacramento	Best flooring tile.
George Muddox	Sacramento	Best terra cotta.
George Muddox	Sacramento	Best fire bricks.
George Muddox	Sacramento	Best pressed bricks.
George Muddox	Sacramento	Best pottery, various kinds.
George Muddox	Sacramento	Best display of stoneware.
Gladding, McBean & Co.	Lincoln	Best specimen of Rockingham ware.
Gladding, McBean & Co.	Lincoln	Best specimen of stoneware.
Gladding, McBean & Co.	Lincoln	Best water pipe of water lime.
Gladding, McBean & Co.	Lincoln	Best sample of drain tile.
Gladding, McBean & Co.	Lincoln	Best roofing tile.
Gladding, McBean & Co.	Lincoln	Best flooring tile.
Gladding, McBean & Co.	Lincoln	Best terra cotta.
Gladding, McBean & Co.	Lincoln	Best fire bricks.
Gladding, McBean & Co.	Lincoln	Best pressed bricks.
Gladding, McBean & Co.	Lincoln	Best pottery, various kinds.

FOURTH DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.
Gladning, McBean & Co.	Lincoln	Best stoneware.
A. Aitken	Sacramento	Best flooring tile.
H. Palmer	San Francisco	Best demijohn.
C. Newman	San Francisco	Best display of glassware.
C. Newman	San Francisco	Best demijohn, improved box.
Inyo Marble Company	San Francisco	Best dressed stone.

CLASS X—MINERALS, ETC.

EXHIBITOR.	Address.	Articles Exhibited.
W. H. Murray	San Francisco	Best suit of useful minerals.
W. H. Murray	San Francisco	Collection of minerals.
Alex. Keller	Auburn	Suit of useful minerals.
Alex. Keller	Auburn	Suit of fossils of California.
Alex. Keller	Auburn	Suit of illustrating geology.
Alex. Keller	Auburn	Suit of crystallized minerals.
Alex. Keller	Auburn	Suit of polished stone specimens.
H. F. Frye	Relief Hill, Nev.	Best cabinet of minerals.
Nevada County	California	Nevada County exhibit of minerals.
Inyo Marble Company	San Francisco	Variety of marble.

CLASS XI—MARBLE AND GRANITE WORK.

EXHIBITOR.	Address.	Articles Exhibited.
A. Aitken	Sacramento	Polished marble.
A. Aitken	Sacramento	Statuary marble mantel.
A. Aitken	Sacramento	Marbleized slate mantel.
A. Aitken	Sacramento	Marbleized iron mantel.

GOLD MEDAL ENTRIES.

EXHIBITOR.	Address.	Articles Exhibited.
John Breuner	Sacramento	Meritorious exhibit of furniture.
Capital Soap Co.	Sacramento	Display of soap.
Geo. Muddox	Sacramento	Display of stoneware.
A. S. Hopkins & Bro.	Sacramento	Display of woodenware.
Geo. Topping	Sacramento	Display of electro dynamo machine, California manufacture.
Ingram & Bird	Sacramento	Display of furniture.
S. P. Taylor & Co.	San Francisco	Paper display.
Pacific Saw Mfg Co.	San Francisco	Display of saws on exhibition.
Waterhouse Electrc. Mfg Co.	Hartford, Conn.	Display of incandescent light.

FIFTH DEPARTMENT.

CLASS I—SILK, COTTON, AND TOBACCO.

EXHIBITOR.	Address.	Articles Exhibited.
California Cotton Mills	San Francisco	One bale California cotton.
C. H. Street & Co.	San Francisco	Display of silk made in California.
C. H. Street & Co.	San Francisco	Display of California tobacco in leaf.
David Bryan	Grass Valley	Display of California tobacco in leaf.

CLASS II—FLOUR AND GRAIN.

EXHIBITOR.	Address.	Articles Exhibited.
C. McCreary & Co.	Sacramento	Whitest sample family flour.
C. McCreary & Co.	Sacramento	Sample of baker's flour.
J. D. Huffman	Lodi	Display of grain in sheaf.
John Reith	Union House	Sample of Australian wheat.
B. N. Bugbey	Sutter County	Sample of Proper wheat.
B. N. Bugbey	Sutter County	Sample of barley.
B. N. Bugbey	Sutter County	Sample of Chevalier barley.
B. N. Bugbey	Sutter County	Bushel yellow corn.
B. N. Bugbey	Sutter County	Bushel white corn.
Chas. A. Hull	Sacramento	Sample of Chili wheat.
Mrs. R. S. Lockett	Perkins	Exhibit
J. W. Browning	Colusa County	of garden seeds of California production.
Browning & Co.	Colusa County	Sample of Proper wheat.
Browning & Co.	Colusa County	Sample of family flour.
Browning & Co.	Colusa County	Sample of baker's flour.

CLASS III—VEGETABLES, ROOTS, ETC.

EXHIBITOR.	Address.	Articles Exhibited.
Jos. Putman	Clements	Large pumpkin.
E. F. Aiken	Sacramento	Half peck peppers for pickling.
E. F. Aiken	Sacramento	Six marrow squashes.
E. F. Aiken	Sacramento	Six hubbard squashes.
E. F. Aiken	Sacramento	Six crookneck squashes.
E. F. Aiken	Sacramento	Peck of tomatoes.
E. F. Aiken	Sacramento	Large pumpkin.
Harry Foster	Sacramento	Three watermelons.
Harry Foster	Sacramento	Six crookneck squashes.
B. N. Bugbey	Sacramento	Six cucumbers.
B. N. Bugbey	Sutter County	Half bushel sweet potatoes.
B. N. Bugbey	Sutter County	Half bushel Irish potatoes.
B. N. Bugbey	Sutter County	Peck of tomatoes.
B. N. Bugbey	Sutter County	Half peck yellow onions.
B. N. Bugbey	Sutter County	Half peck red onions.
B. N. Bugbey	Sutter County	Half peck white onions.
B. N. Bugbey	Sutter County	Large pumpkin.
B. N. Bugbey	Sutter County	Three mountain sweet watermelons.
B. N. Bugbey	Sutter County	Three striped watermelons.
B. N. Bugbey	Sutter County	Half peck lima beans in pod.
B. N. Bugbey	Sutter County	Six marrow squashes.
J. D. Huffman	Lodi	Six sugar beets.
Mrs. Geo. Muddox	Sacramento	Six turnip beets.
C. Langdon	Humboldt County	Half bushel white potatoes.
C. Langdon	Humboldt County	Half bushel red potatoes.
C. Langdon	Humboldt County	Half peck yellow onions.
W. H. Murray	San Francisco	Six sugar beets.
E. A. Bridgford	Colusa	Half bushel sweet potatoes.

FIFTH DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.
Mrs. Geo. Muddox	Sacramento	Six cucumbers.
Mrs. Geo. Muddox	Sacramento	Half peck gherkin cucumbers.
Felice Gabrielli	Sacramento	Half bushel red potatoes.
Felice Gabrielli	Sacramento	Half bushel white potatoes.
Felice Gabrielli	Sacramento	Half bushel potatoes.
Felice Gabrielli	Sacramento	Variety Irish potatoes.
Felice Gabrielli	Sacramento	Half bushel sweet potatoes.
Felice Gabrielli	Sacramento	Twelve parsnips.
Felice Gabrielli	Sacramento	Twelve carrots.
Felice Gabrielli	Sacramento	Six long blood beets.
Felice Gabrielli	Sacramento	Six turnip beets.
Felice Gabrielli	Sacramento	Peck of tomatoes.
Felice Gabrielli	Sacramento	Six drumhead cabbage.
Felice Gabrielli	Sacramento	Six heads red Dutch cabbage.
Felice Gabrielli	Sacramento	Three heads cauliflower.
Felice Gabrielli	Sacramento	Three heads broccoli.
Felice Gabrielli	Sacramento	Three heads lettuce.
Felice Gabrielli	Sacramento	Half peck red onions.
Felice Gabrielli	Sacramento	Half peck yellow onions.
Felice Gabrielli	Sacramento	Half peck white onions.
Felice Gabrielli	Sacramento	Half peck peppers for pickling.
Felice Gabrielli	Sacramento	Twelve roots salsify.
Felice Gabrielli	Sacramento	Six stalks celery.
Felice Gabrielli	Sacramento	Six marrow squashes.
Felice Gabrielli	Sacramento	Six crookneck squashes.
Felice Gabrielli	Sacramento	Large pumpkin.
Felice Gabrielli	Sacramento	Dozen sweet corn (green).
Felice Gabrielli	Sacramento	Three mountain sweet watermelons.
Felice Gabrielli	Sacramento	Three watermelons.
Felice Gabrielli	Sacramento	Three cantaloupes.
Felice Gabrielli	Sacramento	Three muskmelons.
Felice Gabrielli	Sacramento	Six cucumbers.
Felice Gabrielli	Sacramento	Half peck lima beans, in pod.
Felice Gabrielli	Sacramento	Half peck white beans.
Felice Gabrielli	Sacramento	Half peck kidney bush beans.
Felice Gabrielli	Sacramento	Half peck field peas (dry).
Felice Gabrielli	Sacramento	Half peck garden peas (dry).
Felice Gabrielli	Sacramento	Half peck castor oil beans.
Felice Gabrielli	Sacramento	Greatest variety peas (dry).
Felice Gabrielli	Sacramento	Half peck gherkin cucumbers.
Felice Gabrielli	Sacramento	Three purple egg plants.
Felice Gabrielli	Sacramento	Table of vegetables, exhibited by the producer.
Mrs. R. S. Lockett	Perkins	Six crookneck squashes.
Mrs. R. S. Lockett	Perkins	Six cucumbers.
J. D. Huffman	Lodi	Table of vegetables, exhibited by one person.

CLASS IV—FLOWERS.

EXHIBITOR.	Address.	Articles Exhibited.
Bell Conservatory Co.	Sacramento	Collection of flowering plants in bloom.
Bell Conservatory Co.	Sacramento	Collection of ornamental foliage plants.
Bell Conservatory Co.	Sacramento	Display of cut flowers.
Bell Conservatory Co.	Sacramento	Collection of new and rare plants.
Bell Conservatory Co.	Sacramento	Display of coleus.
Bell Conservatory Co.	Sacramento	Exhibit of named varieties of dahlias.
Bell Conservatory Co.	Sacramento	Collection of roses in bloom.
Bell Conservatory Co.	Sacramento	Collection of fuchsias in bloom.
Bell Conservatory Co.	Sacramento	Collection of tuberose in bloom.
Bell Conservatory Co.	Sacramento	Collection of pinks.
Bell Conservatory Co.	Sacramento	Collection of ferns.
Bell Conservatory Co.	Sacramento	Display of bouquets.
Bell Conservatory Co.	Sacramento	Collection of plants suitable for conservatory, greenhouse, and window culture.

FIFTH DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.
Bell Conservatory Co.	Sacramento	Display
Mrs. L. B. Sutliff	Sacramento	of hanging baskets containing plants.
Mrs. L. B. Sutliff	Sacramento	Exhibit of named varieties of dahlias (twelve varieties).
		Display of cut flowers.

CLASS V—DAIRY PRODUCTS.

EXHIBITOR.	Address.	Articles Exhibited.
John Burns	Nicolaus	Cheese one year old.
John Burns	Nicolaus	Cheese over one year old.
John Burns	Nicolaus	Display of cheese.
J. McM. Shafter	San Francisco	Cheese one year old.
J. McM. Shafter	San Francisco	Cheese over one year old.
J. McM. Shafter	San Francisco	Display of cheese.

CLASS VI—BUTTER, BREAD, ETC.

EXHIBITOR.	Address.	Articles Exhibited.
L. F. Eaton	Florin	Five pounds
J. McM. Shafter	San Francisco	pure Jersey butter made in California.
J. McM. Shafter	San Francisco	Five pounds
J. McM. Shafter	San Francisco	pure Jersey butter made in California.
J. McM. Shafter	San Francisco	Display of butter in rolls.
		Tub of firkin butter.

CLASS VI—BREAD AND CEREAL FOOD.

EXHIBITOR.	Address.	Articles Exhibited.
Lizzie B. Aiken	Sacramento	Soda biscuit.
Lizzie B. Aiken	Sacramento	Biscuit.
Lizzie B. Aiken	Sacramento	Domestic corn bread.
Lizzie B. Aiken	Sacramento	Domestic brown bread.
Lizzie B. Aiken	Sacramento	Cream waffles.
Mrs. G. E. Burwell	Sacramento	Domestic corn bread.
Mrs. G. E. Burwell	Sacramento	Domestic brown bread.
Mrs. G. E. Burwell	Sacramento	Graham bread.
Mrs. G. E. Burwell	Sacramento	Domestic wheat bread.
Mrs. G. E. Burwell	Sacramento	Display of domestic bread.
L. B. Aiken	Sacramento	Display of domestic bread.
American Biscuit Co.	San Francisco	Pilot.
American Biscuit Co.	San Francisco	Biscuit.
American Biscuit Co.	San Francisco	Soda biscuit.
American Biscuit Co.	San Francisco	Crackers (butter).
American Biscuit Co.	San Francisco	Crackers (sweet).
American Biscuit Co.	San Francisco	Boston crackers.
Miss S. Sullivan	Sacramento	Graham bread.
Miss S. Sullivan	Sacramento	Domestic wheat bread.
Miss S. Sullivan	Sacramento	Domestic corn bread.
Miss S. Sullivan	Sacramento	Soda biscuit.
Mrs. R. S. Frazee	Sacramento	Domestic wheat bread.
Mrs. D. de Hull	Union House	Biscuit.
Mrs. D. de Hull	Union House	Soda biscuit.
Mrs. D. de Hull	Union House	Domestic corn bread.
Mrs. D. de Hull	Union House	Domestic brown bread.
Mrs. D. de Hull	Union House	Domestic wheat bread.
Mrs. D. de Hull	Union House	Display of domestic bread.
Agnes Hopper	Sacramento	Soda biscuit.

FIFTH DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.
Agnes Hopper.....	Sacramento.....	 Biscuit.
Agnes Hopper.....	Sacramento.....	 Domestic brown bread.
Mrs. W. H. Wright.....	Sacramento.....	 Soda biscuit.
Mrs. W. H. Wright.....	Sacramento.....	 Domestic corn bread.
Mrs. W. H. Wright.....	Sacramento.....	 Domestic rye bread.
Mrs. W. H. Wright.....	Sacramento.....	 Domestic brown bread.
Mrs. W. H. Wright.....	Sacramento.....	 Domestic graham bread.
Mrs. W. H. Wright.....	Sacramento.....	 Domestic wheat bread.
Mrs. W. H. Wright.....	Sacramento.....	 Display of domestic bread.
Mrs. S. Conrad.....	Sacramento.....	 Domestic wheat bread.
Mrs. S. Conrad.....	Sacramento.....	 Domestic rye bread.
Mrs. S. Conrad.....	Sacramento.....	 Domestic corn bread.
Mrs. S. Conrad.....	Sacramento.....	 Domestic brown bread.
Mrs. S. Conrad.....	Sacramento.....	 Graham bread.
Mrs. S. Conrad.....	Sacramento.....	 Display of domestic bread.
Miss Emma Muddox.....	Sacramento.....	 Domestic corn bread.
Miss Emma Muddox.....	Sacramento.....	 Domestic rye bread.
Miss Emma Muddox.....	Sacramento.....	 Domestic brown bread.
Miss Emma Muddox.....	Sacramento.....	 Domestic wheat bread.
Miss Emma Muddox.....	Sacramento.....	 Graham bread.
Miss Emma Muddox.....	Sacramento.....	 Display of domestic bread.
Miss Agnes Hopper.....	Sacramento.....	 Domestic corn bread.
Miss Agnes Hopper.....	Sacramento.....	 Graham bread.
Miss Ana Fist.....	Sacramento.....	 Biscuit.
Miss Ana Fist.....	Sacramento.....	 Soda biscuit.
Miss Ida M. Wolfe.....	Sacramento.....	 Domestic corn bread.
Miss Ida M. Wolfe.....	Sacramento.....	 Domestic rye bread.
Miss Ida M. Wolfe.....	Sacramento.....	 Domestic brown bread.
Miss Ida M. Wolfe.....	Sacramento.....	 Domestic bread.
Miss Ida M. Wolfe.....	Sacramento.....	 Graham bread.
Miss Ida M. Wolfe.....	Sacramento.....	 Biscuit.
W. F. Peterson.....	Sacramento.....	 Four loaves baker's bread.
W. F. Peterson.....	Sacramento.....	 Graham bread.
Mrs. P. M. Artz.....	Perkins.....	 Biscuit.
Mrs. P. M. Artz.....	Perkins.....	 Domestic corn bread.
Mrs. P. M. Artz.....	Perkins.....	 Domestic brown bread.
Miss Ella Patton.....	Florin.....	 Domestic wheat bread.

CLASS VII—SUGAR, SYRUP, ETC.

EXHIBITOR.	Address.	Articles Exhibited.
C. F. Barton.....	Sacramento.....	 Display of confectionery.
C. F. Barton.....	Sacramento.....	 General varieties of candies made in hall during exhibition.
W. H. Murray.....	San Francisco.....	 Display of sugar-cane.
Mrs. R. S. Lockett.....	Sacramento.....	 Display of sugar-cane.
W. H. Murray.....	San Francisco.....	 One hundred pounds of sugar made from sugar beets.

ENTRIES FOR GOLD MEDALS.

EXHIBITOR.	Address.	Articles Exhibited.
C. McCreary.....	Sacramento.....	 Flour and mill feed.
Bell Conservatory Co.....	Sacramento.....	 Flowers and flowering plants.
American Biscuit Co.....	San Francisco.....	 Display of crackers, etc.

SIXTH DEPARTMENT.

CLASS I—APPLES.

EXHIBITOR.	Address.	Articles Exhibited.
J. Putman	Clements	Display and variety of apples.
Clark & Williamson	Penryn	Display and variety of apples.
H. A. Frost	Dutch Flat	Display and variety of apples.
B. N. Bugbey	Sutter County	Display and variety of apples.
W. D. Carpenter	El Dorado County	Display and variety of apples.
C. Weisenberger	Nevada City	Display and variety of apples.
W. Wilkenson	Lowell Hill	Display and variety of apples.
S. N. Stranahan	Nevada City	Display and variety of apples.
A. C. Guillispie	Nevada City	Display and variety of apples.
J. Levee	Lowell Hill	Display and variety of apples.
Dr. A. Chapman	Nevada City	Display and variety of apples.
J. B. Dupray	Nevada City	Display and variety of apples.
Mrs. R. S. Lockett	Perkins	Display and variety of apples.

CLASS I—PEARS.

EXHIBITOR.	Address.	Articles Exhibited.
Jos. Putman	Clements	Display and variety.
J. B. Welty	Sacramento	Display and variety.
Clark & Williamson	Penryn	Display and variety.
H. A. Frost	Dutch Flat	Display and variety.
B. N. Bugbey	Sutter County	Display and variety.
G. H. Kerr	Elk Grove	Display and variety.
J. P. Odbert	Sacramento	Display and variety.
E. F. Aiken	Sacramento	Display and variety.
W. D. Carpenter	El Dorado County	Display and variety.
C. Weisenberger	Nevada City	Display and variety.
A. C. Guillispie	Nevada City	Display and variety.
J. Levee	Lowell Hill	Display and variety.
Dr. A. Chapman	Nevada City	Display and variety.
J. B. Dupray	Nevada City	Display and variety.
Mrs. R. S. Lockett	Perkins	Display and variety.

CLASS I—PEACHES.

EXHIBITOR.	Address.	Articles Exhibited.
John Reith, Jr.	Penryn	Display and variety.
J. A. Robinson	Newcastle	Display and variety.
P. W. Butler	Penryn	Display and variety.
Jos. Putman	Clements	Display and variety.
Mrs. L. B. Sutliff	Sacramento	Display and variety.
C. T. Adams	Newcastle	Display and variety.
J. B. Welty	Sacramento	Display and variety.
Harry Foster	Sacramento	Display and variety.
E. F. Aiken	Sacramento	Display and variety.
Clark & Williamson	Penryn	Display and variety.
B. N. Bugbey	Sutter County	Display and variety.
Mrs. M. E. Fox	Newcastle	Display and variety.
W. D. Carpenter	El Dorado County	Display and variety.
J. B. Dupray	Nevada City	Display and variety.
Mrs. R. S. Lockett	Perkins	Display and variety.
I. H. Thomas	Visalia	Display and variety.

SIXTH DEPARTMENT—Continued.

CLASS I—PLUMS.

EXHIBITOR.	Address.	Articles Exhibited.
E. F. Aiken	Sacramento	 Display and variety.
Clark & Williamson	Penryn	 Display and variety.
Mrs. J. Shields	Routiers	 Display and variety.
Mrs. M. E. Fox	Newcastle	 Display and variety.
W. D. Carpenter	El Dorado County	 Display and variety.
Mrs. R. S. Lockett	Penryn	 Display and variety.

CLASS I—FIGS.

EXHIBITOR.	Address.	Articles Exhibited.
Jos. Putman	Clements	 Display and variety.
Clark & Williamson	Penryn	 Display and variety.
Harry Foster	Sacramento	 Display and variety.
Mrs. M. E. Fox	Newcastle	 Display and variety.
H. E. Parker	Penryn	 Display and variety.
Mrs. R. S. Lockett	Perkins	 Display and variety.

CLASS I—TROPICAL FRUITS.

EXHIBITOR.	Address.	Articles Exhibited.
Clark & Williamson	Penryn	 Display and variety.
Mrs. M. E. Fox	Newcastle	 Display and variety.

CLASS I—ORANGES AND LEMONS.

EXHIBITOR.	Address.	Articles Exhibited.
Isaac Lea	Florin	 Display and variety of oranges.
Clark & Williamson	Penryn	 Display and variety of oranges.
Mrs. M. E. Fox	Newcastle	 Display and variety of oranges.

CLASS I—GENERAL DISPLAY.

EXHIBITOR.	Address.	Articles Exhibited.
Joseph Putman	Clements	 General display of fruit by producer.
Clark & Williamson	Penryn	 General display of fruit by producer.
Mrs. M. E. Fox	Newcastle	 General display of fruit by producer.
W. D. Carpenter	El Dorado County	 General display of fruit by producer.
S. N. Stranahan	Nevada City	 General display of fruit by producer.
Mrs. R. S. Lockett	Perkins	 General display of fruit by producer.

SIXTH DEPARTMENT—Continued.

CLASS II—HONEY, PRESERVES, ETC.

EXHIBITOR.	Address.	Articles Exhibited.
Mrs. Geo. C. McMullen	Sacramento	Six jars raspberry jelly.
Mrs. Geo. C. McMullen	Sacramento	Six jars red currant jelly.
Mrs. Geo. C. McMullen	Sacramento	Six jars blackberry jelly.
Mrs. Geo. C. McMullen	Sacramento	Six jars strawberry jelly.
Mrs. Geo. C. McMullen	Sacramento	Six jars quince jelly.
Mrs. Geo. C. McMullen	Sacramento	Six jars blackberry jam.
Mrs. Geo. C. McMullen	Sacramento	Six jars raspberry jam.
Mrs. Geo. C. McMullen	Sacramento	Best display of jams and jellies in glass.
Mrs. Geo. C. McMullen	Sacramento	Strawberry jam.
Mrs. H. E. Parker	Penryn	Six jars strawberry jelly.
Mrs. H. E. Parker	Penryn	Six jars quince jelly.
Mrs. H. E. Parker	Penryn	Six jars red currant jelly.
Mrs. H. E. Parker	Penryn	Six jars raspberry jelly.
Mrs. H. E. Parker	Penryn	Six jars blackberry jelly.
Mrs. H. E. Parker	Penryn	Six jars raspberry jam.
Mrs. H. E. Parker	Penryn	Display of jams and jellies in glass.
May Kewen	Sacramento	Six jars red currant jelly.
May Kewen	Sacramento	Six jars blackberry jelly.
May Kewen	Sacramento	Six jars blackberry jam.
May Kewen	Sacramento	Display of brandied peaches.
Mrs. Geo. Muddox	Sacramento	Ten pounds California honey.
Mrs. Geo. Muddox	Sacramento	Display of pickles.
J. P. Odbert	Sacramento	Display of fruit in glass.
J. P. Odbert	Sacramento	Display of pickles.
Mrs. Geo. Muddox	Sacramento	Display of fruit in glass.
Mrs. Geo. Muddox	Sacramento	Six jars raspberry jelly.
Mrs. Geo. Muddox	Sacramento	Six jars red currant jelly.
Mrs. Geo. Muddox	Sacramento	Six jars blackberry jelly.
Mrs. Geo. Muddox	Sacramento	Six jars black currant jelly.
Mrs. Geo. Muddox	Sacramento	Six jars strawberry jelly.
Mrs. Geo. Muddox	Sacramento	Six jars quince jelly.
Mrs. Geo. Muddox	Sacramento	Six jars blackberry jam.
Mrs. Geo. Muddox	Sacramento	Six jars raspberry jam.
Mrs. Geo. Muddox	Sacramento	Display of jams and jellies in glass.
J. B. Dupray	Nevada County	Ten pounds California honey.
Lebenbaum Bros.	San Francisco	Display of jams and jellies in glass.
Lebenbaum Bros.	San Francisco	Display of canned and preserved jams, jellies, etc., by factory.
Mrs. Addie Carter	Sacramento	Display of fruit in glass by other than factory.
Mrs. Addie Carter	Sacramento	Six jars raspberry jelly.
Mrs. Addie Carter	Sacramento	Six jars red currant jelly.
Mrs. Addie Carter	Sacramento	Six jars black currant jelly.
Mrs. Addie Carter	Sacramento	Six jars blackberry jelly.
Mrs. Addie Carter	Sacramento	Six jars strawberry jelly.
Mrs. Addie Carter	Sacramento	Six jars quince jelly.
Mrs. Addie Carter	Sacramento	Six jars blackberry jam.
Mrs. Addie Carter	Sacramento	Six jars raspberry jam.
Mrs. Addie Carter	Sacramento	Display of jams and jellies in glass.
Mrs. Addie Carter	Sacramento	Display of brandied peaches.
Mrs. C. Weber	Nevada County	Display of fruit in glass.
Mrs. C. Weber	Nevada County	Display of jams and jellies.
Mrs. C. Weber	Nevada County	Six jars currant jelly.
Mrs. C. Weber	Nevada County	Six jars blackberry jelly.
Mrs. W. J. Hill	Nevada County	Display of fruit in glass.
Mrs. F. G. Beaty	Nevada County	Display of fruit in glass.
Mrs. F. G. Beaty	Nevada County	Display of jams and jellies.
Mrs. F. G. Beaty	Nevada County	Six jars raspberry jelly.
Mrs. F. G. Beaty	Nevada County	Six jars currant jelly.
Mrs. F. G. Beaty	Nevada County	Six jars blackberry jelly.

SIXTH DEPARTMENT—Continued.

CLASS III—DRIED AND PRESERVED FRUITS, NUTS, ETC.

EXHIBITOR.	Address.	Articles Exhibited.
D. H. Clippinger	Perkins	Ten pounds dried peaches by producer.
D. H. Clippinger	Perkins	Ten pounds dried figs by producer.
D. H. Clippinger	Perkins	General display of dried fruits by factory.
E. Booth	Roseville	Ten pounds dried peaches.
E. Booth	Roseville	Ten pounds dried nectarines.
E. Booth	Roseville	Ten pounds dried plums.
E. Booth	Roseville	Ten pounds dried prunes.
E. Booth	Roseville	Ten pounds dried apples.
E. Booth	Roseville	Ten pounds dried pears.
William Foster	Lincoln	Ten pounds dried prunes.
B. N. Bugbey	Sutter County	Ten pounds dried prunes.
Mrs. J. Shields	Routiers	Ten pounds dried peaches.
Mrs. J. Shields	Routiers	Ten pounds dried plums.
Mrs. J. Shields	Routiers	Ten pounds dried prunes.
Mrs. J. Shields	Routiers	Ten pounds dried apricots.
D. H. Clippinger	Perkins	Ten pounds dried nectarines.
D. H. Clippinger	Perkins	Ten pounds dried pears.
D. H. Clippinger	Perkins	Ten pounds dried apples.
D. H. Clippinger	Perkins	Ten pounds dried prunes.
Mrs. M. E. Fox	Newcastle	Ten pounds dried peaches.
Mrs. M. E. Fox	Newcastle	Ten pounds dried plums.
Mrs. M. E. Fox	Newcastle	Ten pounds dried prunes.
Mrs. M. E. Fox	Newcastle	Ten pounds dried figs.
Mrs. M. E. Fox	Newcastle	General display dried fruits by producer.
P. W. Butler	Penryn	Ten pounds dried peaches.
H. E. Parker	Penryn	Ten pounds dried figs.
W. D. Carpenter	Diamond Springs	Ten pounds dried apples.
W. D. Carpenter	Diamond Springs	Ten pounds dried pears.
W. D. Carpenter	Diamond Springs	Ten pounds dried peaches.
W. D. Carpenter	Diamond Springs	Ten pounds dried plums.
W. D. Carpenter	Diamond Springs	Ten pounds dried prunes.
W. D. Carpenter	Diamond Springs	Ten pounds dried apricots.
W. D. Carpenter	Diamond Springs	Ten pounds dried nectarines.
W. D. Carpenter	Diamond Springs	Ten pounds dried figs.
W. D. Carpenter	Diamond Springs	Display of dried fruits by producer.
S. N. Stranahan	Nevada City	Ten pounds dried apples.
S. N. Stranahan	Nevada City	Ten pounds dried pears.
S. N. Stranahan	Nevada City	Ten pounds dried peaches.
S. N. Stranahan	Nevada City	Ten pounds dried plums.
S. N. Stranahan	Nevada City	Ten pounds dried prunes.
S. N. Stranahan	Nevada City	Ten pounds dried nectarines.
S. N. Stranahan	Nevada City	Ten pounds dried cherries.
S. N. Stranahan	Nevada City	Ten pounds dried raspberries.
S. N. Stranahan	Nevada City	Ten pounds dried strawberries.
S. N. Stranahan	Nevada City	General display of dried fruits by producer.
Mrs. R. S. Lockett	Perkins	General display of fruits by producer.

CLASS III—CULTIVATED NUTS RAISED BY EXHIBITOR.

EXHIBITOR.	Address.	Articles Exhibited.
E. F. Aiken	Sacramento	Display of peanuts.
W. H. Williamson	Routiers	Display of soft shell almonds.
Clark & Williamson	Penryn	Display of soft shell almonds.
B. N. Bugbey	Sutter County	Display of peanuts.
D. H. Clippinger	Perkins	Display of almonds.
Mrs. R. S. Lockett	Perkins	Display of almonds.

SIXTH DEPARTMENT—Continued.

CLASS III—MISCELLANEOUS.

EXHIBITOR.	Address.	Articles Exhibited.
Bean Spray Pump Co.	Los Gatos	 Wash for destroying scale insects on fruit trees, with directions for use.
Bean Spray Pump Co.	Los Gatos	 Wash for destroying codlin moth and its larva on fruit trees, with full directions for use.

CLASS IV—GRAPES AND RAISINS.

EXHIBITOR.	Address.	Articles Exhibited.
Joseph Putman	Clements	 Variety of table grapes.
C. T. Adams	Newcastle	 Six varieties table grapes.
C. T. Adams	Newcastle	 Three varieties table grapes.
C. T. Adams	Newcastle	 One variety table grapes.
C. T. Adams	Newcastle	 General display of grapes by producer.
E. Booth	Roseville	 Display of raisins.
J. B. Welty	Sacramento	 One variety wine grapes.
Wm. Foster	Lincoln	 Display of California raisins.
J. B. Whitcomb	Colfax	 Six varieties table grapes.
J. B. Whitcomb	Colfax	 Three varieties table grapes.
J. B. Whitcomb	Colfax	 One variety table grapes.
J. B. Whitcomb	Colfax	 Six varieties wine grapes.
J. B. Whitcomb	Colfax	 Three varieties wine grapes.
J. B. Whitcomb	Colfax	 One variety wine grapes.
J. B. Whitcomb	Colfax	 General display of grapes by producer.
Geo. H. Kerr	Elk Grove	 Six varieties table grapes.
Geo. H. Kerr	Elk Grove	 Three varieties table grapes.
Geo. H. Kerr	Elk Grove	 One variety table grapes.
Geo. H. Kerr	Elk Grove	 One variety wine grapes.
Geo. H. Kerr	Elk Grove	 General display of grapes by producer.
E. L. Hawk	Rocklin	 Six varieties table grapes.
E. L. Hawk	Rocklin	 Three varieties table grapes.
E. L. Hawk	Rocklin	 One variety table grapes.
E. L. Hawk	Rocklin	 Three varieties wine grapes.
E. L. Hawk	Rocklin	 One variety wine grapes.
John Rieth, Jr.	Penryn	 Three varieties table grapes.
John Rieth, Jr.	Penryn	 One variety table grapes.
Mrs. M. E. Fox	Newcastle	 Display of seedless raisins.
J. N. Nile	Grass Valley	 Six varieties table grapes.
J. N. Nile	Grass Valley	 Three varieties table grapes.
J. N. Nile	Grass Valley	 One variety table grapes.
J. N. Nile	Grass Valley	 Six varieties wine grapes.
J. N. Nile	Grass Valley	 Three varieties wine grapes.
J. N. Nile	Grass Valley	 One variety wine grapes.
J. N. Nile	Grass Valley	 General display of grapes by producer.
Thos. W. Payne	Grass Valley	 Six varieties table grapes.
Thos. W. Payne	Grass Valley	 Three varieties table grapes.
Thos. W. Payne	Grass Valley	 One variety table grapes.
Thos. W. Payne	Grass Valley	 Six varieties wine grapes.
Thos. W. Payne	Grass Valley	 Three varieties wine grapes.
Thos. W. Payne	Grass Valley	 One variety wine grapes.
Thos. W. Payne	Grass Valley	 General display of grapes by producer.
Mrs. R. S. Lockett ..	Perkins	 Display of California raisins.
Mrs. R. S. Lockett ..	Perkins	 Six varieties table grapes.
Mrs. R. S. Lockett ..	Perkins	 Three varieties table grapes.
Mrs. R. S. Lockett ..	Perkins	 One variety table grapes.
Mrs. R. S. Lockett ..	Perkins	 Three varieties wine grapes.
Mrs. R. S. Lockett ..	Perkins	 Six varieties wine grapes.
Mrs. R. S. Lockett ..	Perkins	 One variety wine grapes.
Mrs. R. S. Lockett ..	Perkins	 General display of grapes by producer.
W. D. Carpenter	Diamond Springs ..	 Six varieties table grapes.
W. D. Carpenter	Diamond Springs ..	 Three varieties table grapes.
W. D. Carpenter	Diamond Springs ..	 One variety table grapes.
W. D. Carpenter	Diamond Springs ..	 Three varieties wine grapes.
W. D. Carpenter	Diamond Springs ..	 One variety wine grapes.

SIXTH DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.
W. D. Carpenter	Diamond Springs	General display of grapes by producer.
W. D. Carpenter	Diamond Springs	 Six varieties wine grapes.
Geo. H. Kerr	Elk Grove	 Three varieties wine grapes.

CLASS V—BRANDIES AND WINES.

EXHIBITOR.	Address.	Articles Exhibited.
H. W. Crabb	Napa County	 General display of California brandies and wines.
H. W. Crabb	Napa County	 Grape brandy over one year old.
H. W. Crabb	Napa County	 Grape brandy one year old.
John Kaiser	Loomis	 General display of California brandies and wines.
John Kaiser	Loomis	 Grape brandy over one year old.
John Kaiser	Loomis	 Grape brandy one year old.
M. S. Nevis	Sacramento	 General display of California brandies and wines.
M. S. Nevis	Sacramento	 Grape brandy one year old.
M. S. Nevis	Sacramento	 Grape brandy over one year old.
H. G. Leeman	Grass Valley	 General display of California brandies and wines.
H. G. Leeman	Grass Valley	 Grape brandy over one year old.
J. Gundlach & Co.	San Francisco	 General display of California brandies and wines.
J. Gundlach & Co.	San Francisco	 California brandies and wines.
J. Gundlach & Co.	San Francisco	 Grape brandy over one year old.

CLASS V—SWEET WINES.

EXHIBITOR.	Address.	Articles Exhibited.
H. W. Crabb	Napa County	 Sweet wine
H. W. Crabb	Napa County	 Muscatel (vintage of 1884).
H. W. Crabb	Napa County	 Malaga (vintage of 1886).
H. W. Crabb	Napa County	 Madeira (vintage of 1886).
H. W. Crabb	Napa County	 Port (vintage of 1876 and 1886).
H. W. Crabb	Napa County	 Blackberry (vintage of 1883).
H. W. Crabb	Napa County	 Tokay (vintage of 1884).
H. W. Crabb	Napa County	 Sherry (vintage of 1886).
John Kaiser	Loomis	 Sweet wine.
Mrs. George Muddox ..	Sacramento	 Sweet wine.
M. S. Nevis	Sacramento	 Sweet wine—angelica, sherry, port.
H. G. Leeman	Grass Valley	 Sweet wine.
F. C. Helwig	Nevada	 Sweet wine.
M. M. Estee	Napa	 Sweet wine.
J. Gundlach	San Francisco	 Sweet wine.

CLASS V—DRY WINES.

EXHIBITOR.	Address.	Articles Exhibited.
H. W. Crabb	Napa County	 White wine (vintage of 1886)—sauterne, riesling, gautadel, semillion, musque, chablis.
H. W. Crabb	Napa County	 Claret wine over one year old—chamberlaine (vintage of 1886), biclin (vintage of 1886), cabernet, sauvignon (vintage of 1886), burgundy (vintage of 1884).
H. W. Crabb	Napa County	 Claret wine one year old (vintage of 1887)—petit surah, black pinot, zinfandel.

SIXTH DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.
John Kaiser	Loomis	White wine (vintage of 1885-86).
John Kaiser	Loomis	Claret wine over one year old.
John Kaiser	Loomis	Claret wine one year old.
M. S. Nevis	Sacramento	White wine—riesling.
M. S. Nevis	Sacramento	Claret wine over one year old—zinfandel (vintage of 1883 and 1887).
Thomas N. Payne	Grass Valley	White wine.
Thomas N. Payne	Grass Valley	Claret wine.
F. C. Helwig	Nevada	White wine.
F. C. Helwig	Nevada	Claret wine.
M. M. Estee	Napa	White wine.
M. M. Estee	Napa	Claret wine over one year old.
M. S. Nevis	Sacramento	Claret wine one year old.
M. M. Estee	Napa	Claret wine one year old.
J. Gundlach & Co.	San Francisco	White wine.
J. Gundlach & Co.	San Francisco	Claret wine over one year old.
J. Gundlach & Co.	San Francisco	Claret wine one year old.

CLASS V—SPECIAL WINES.

EXHIBITOR.	Address.	Articles Exhibited.
H. W. Crabb	Napa County	California port.
H. W. Crabb	Napa County	California sherry.
John Kaiser	Loomis	California port.
John Kaiser	Loomis	California sherry.
H. Palmer & Co.	San Francisco	California port.
M. S. Nevis	Sacramento	California port.
M. S. Nevis	Sacramento	California sherry.
A. Combe	Grass Valley	California port.
H. G. Leeman	Grass Valley	California port.
H. G. Leeman	Grass Valley	California sherry.
J. J. Rolfe	Nevada	California sherry.
A. Combe	Grass Valley	California sherry.
F. C. Helwig	Nevada	California port.
M. M. Estee	Napa	California port.
J. R. Nickerson	Grass Valley	California sherry (made from currants).
J. Gundlach & Co.	San Francisco	California sherry.

ENTRIES FOR GOLD MEDAL.

EXHIBITOR.	Address.	Articles Exhibited.
D. H. Clippinger	Perkins	Dried fruit.
Mrs. R. S. Lockett	Perkins	Green fruits, dried fruits, and nuts.
J. Gundlach & Co.	San Francisco	Display of wines and brandies.

SEVENTH DEPARTMENT.

CLASS I—OIL PAINTINGS, WATER COLORS, CRAYONS, ETC.

EXHIBITOR.	Address.	Articles Exhibited.
Edward Deakin.....	San Francisco.....	Thirty-three oil paintings.
John A. Stanton.....	San Francisco.....	Eight oil paintings.
A. Michelson.....	San Francisco.....	One pastel and two crayon portraits.
Amanda Austin.....	Sacramento.....	Two oil paintings and one crayon.
Mrs. W. Ireland.....	San Francisco.....	Two oil paintings and seven crayons.
H. Raschen.....	San Francisco.....	Four oil paintings.
Alice H. Vincent.....	Oakland.....	Three oil paintings.
Mary Curtis Richardson.....	San Francisco.....	Two oil paintings.
C. T. Wilson.....	San Francisco.....	Two oil paintings.
Norton Bush.....	San Francisco.....	Nine oil paintings.
C. Von Perbandt.....	San Francisco.....	Two oil paintings.
F. L. Heath.....	Santa Cruz.....	Eight oil paintings.
J. Rastell.....	Oakland.....	Four oil paintings.
Oscar Kunath.....	San Francisco.....	Two oil paintings.
A. Joulain.....	San Francisco.....	Five oil paintings.
Emil Carlson.....	San Francisco.....	Two oil paintings.
H. W. Arthur Nahl.....	San Francisco.....	One oil painting and five crayons.
Mrs. E. Dedman.....	Placerville.....	Nine oil paintings.
William Keith.....	San Francisco.....	Fourteen oil paintings.
W. F. Jackson.....	Sacramento.....	One oil painting.
A. C. Rodriguez.....	San Francisco.....	Twelve oil paintings.
Fred. Yates.....	San Francisco.....	Seven oil paintings.
J. Brouchaud.....	San Francisco.....	Two oil paintings.
S. M. Brookes.....	San Francisco.....	Ten oil paintings.
E. Narjot.....	San Francisco.....	Seven oil paintings.
R. D. Yelland.....	San Francisco.....	Four oil paintings.
L. Roethe.....	San Francisco.....	Two oil paintings and five pastels.
Eva Withrow.....	San Francisco.....	Five oil paintings, ten pastels, and charcoals.
Mrs. A. E. Rogers.....	San Francisco.....	One oil painting.
Charles Prosch.....	San Francisco.....	Seven oil paintings.
Chris. Jorgensen.....	San Francisco.....	Seven water colors.
G. Boedewig.....	San Francisco.....	Three crayons and one pastel.
Charles Prosch.....	San Francisco.....	One water color.
Mrs. S. Farnam.....	San Francisco.....	One water color.
Oscar Deakin.....	San Francisco.....	Six water colors.
Adaline Morse.....	San Francisco.....	Five water colors.
W. J. Mier.....	Sacramento.....	Four crayon portraits.
H. Raschen.....	San Francisco.....	Five charcoal drawings.
Kate P. Herrick.....	Sacramento.....	Eleven oil paintings.
Mrs. M. H. Payne.....	San Francisco.....	Five oil paintings.
W. J. Straight.....	Grass Valley.....	One oil painting.
Mrs. M. C. Boyd.....	San Francisco.....	Seven oil paintings.
R. Helms.....	Sacramento.....	Exhibition of portraits in oil, water colors, and pastels.
Sacramento Art School.....	Sacramento.....	Exhibition of oil paintings and crayons.

CLASS I—AMATEURS' GALLERY—OIL PAINTINGS, WATER COLORS, ETC.

EXHIBITOR.	Address.	Articles Exhibited.
Mrs. M. E. Tryon.....	Sacramento.....	Fourteen oil paintings.
Mrs. W. G. Richardson.....	San Francisco.....	Five oil paintings.
Paul Memogoena.....	San Francisco.....	Two oil paintings, one crayon.
Miss Belle Hey.....	San Francisco.....	Two oil paintings.
Miss Addie L. Hughes.....	Sacramento.....	One oil painting.
Miss Mary Crouch.....	Sacramento.....	One crayon drawing.
Miss Louise Harris.....	Oakland.....	One oil painting.
Mrs. S. S. Boynton.....	Oroville.....	Seven oil paintings.
Miss S. Jennie Hopper.....	Sacramento.....	Seven oil paintings, one water color.
Miss Maggie O'Toole.....	Freeport.....	Five crayon drawings, one water color.

SEVENTH DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.
Miss Josephine Hayes	Sacramento	Three oil paintings.
Miss Annie C. Pearl	Sacramento	Three oil paintings.
Miss Mary Slayback	Sacramento	Three crayon drawings.
Clarkson Dye	San Francisco	Two oil and two water color paintings.
J. R. Lafontaine	San Francisco	Two oil paintings, one crayon drawing.
W. B. Sawyer	Sacramento	Four oil paintings.
Mrs. M. E. Phipps	Yuba City	Two oil paintings, one crayon, one india ink.
Miss Mary Fry	Walsh Station	Three oil paintings.
Miss Mary Horstmeyer	Sacramento	Three oil paintings.
Miss Louisa J. Conrad	Sacramento	Four crayons, two pen and ink drawings.
Mrs. H. C. Briggs	Oakland	One painted screen.
Mrs. Frank Powell	Folsom	Two oil paintings.

CLASS II—PHOTOGRAPHS.

EXHIBITOR.	Address.	Articles Exhibited.
A. O. Gregory	Sacramento	Display of photographs.
S. Boysen	Sacramento	Display of photographs.
George B. Stewart	Sacramento	Display of landscape photographs.
I. Taber	San Francisco	Display of photographs.

CLASS III—ETCHINGS, INDIA INK, PEN AND PENCIL DRAWINGS.

EXHIBITOR.	Address.	Articles Exhibited.
Carl Eisenchimmel	San Francisco	Three specimens penmanship.
Chris. Jorgensen	San Francisco	Six specimens pen and ink drawing.
John A. Stanton	San Francisco	Twelve specimens pencil and ink drawing.
Oscar Deakin	San Francisco	Two specimens pen drawing.

CLASS IV—STATUARY, FRESCO, MOSAIC, AND CARVED WORK.

EXHIBITOR.	Address.	Articles Exhibited.
F. Happersberger	San Francisco	Seven specimens statuary.
Frederick Flohr	San Francisco	Fourteen specimens statuary.
W. A. Newell	San Francisco	Three specimens statuary.
Charles Holland	Sacramento	Four specimens statuary in soap.

CLASS V—PENMANSHIP.

EXHIBITOR.	Address.	Articles Exhibited.
Sacramento Business Coll.	Sacramento	Display of penmanship.
Bainbridge Business Coll.	Sacramento	Display of penmanship.
Barnard's Business College	San Francisco	Display of penmanship.

CLASS VI—JUVENILES.

EXHIBITOR.	Address.	Articles Exhibited.
Fred. Blanchard	Sacramento	Seven crayon drawings.
Fillmore White	Sacramento	Two pen drawings.

SEVENTH DEPARTMENT—Continued.

CLASS VII—CALIFORNIA DRAWINGS AND DESIGNS.

EXHIBITOR.	Address.	Articles Exhibited.
Jacob Lentzen & Son	San José	 Original mechanical drawing.
Sac'to Grammar School	Sacramento	 Display of drawing: pen, pencil, and water colors.
Frederick Flohr	San Francisco	 One design for Winn monument.

EIGHTH DEPARTMENT.

COUNTY EXHIBITS.

EXHIBITOR.	Address.	Articles Exhibited.
Sam. Hutchins	Colusa	 Colusa County exhibit.
B. M. Berry	Newcastle	 Placer County exhibit.
J. D. Huffman	Lodi	 San Joaquin County exhibit.
J. R. Nickerson	Nevada City	 Nevada County exhibit.
H. J. Ostrander	Merced	 Merced County exhibit.
Ray White	Fresno	 Fresno County exhibit.
C. Langdon	Rohnerville	 Humboldt County exhibit.

NINTH DEPARTMENT.

MISCELLANEOUS.

EXHIBITOR.	Address.	Articles Exhibited.
A. T. Ames	Galt	Patent riding attachm't for single plows.
S. L. Monday	Black's Station	 Wagon jack.
John Miller	Sacramento	 Glass white hearse.
Stanton, Thomson & Co.	Sacramento	 Sickle grinder.
Stanton, Thomson & Co.	Sacramento	 Wheel scraper.
Stanton, Thomson & Co.	Sacramento	 Road grader.
Stanton, Thomson & Co.	Sacramento	 Sack holder.
Stanton, Thomson & Co.	Sacramento	 Wagon jack.
Fred. Rohrer	Santa Rosa	 Diamond fruit pitter.
S. C. H. Agricultural W'ks ..	Stockton	 Improved shoe for com- bined harvester or thrashing machine.
J. H. H. Pound	San Francisco	 The Australian patent fence, wire stretcher, and permanent fastener.
Pacific Saw Mfg Co.	San Francisco	 Duncan's timber jacks.
W. H. Murray	San Francisco	Model locomotive, California man'fact're.
D. C. Crunney	Los Gatos	 Spray pump.
D. C. Crunney	Los Gatos	 Spray nozzle.
Baker & Hamilton	Sacramento	 Traction engine.
Benicia Agricultural W'ks ..	Benicia	 Store or warehouse trucks.
Benicia Agricultural W'ks ..	Benicia	 Garden barrows.
Benicia Agricultural W'ks ..	Benicia	 Farm cart.
Benicia Agricultural W'ks ..	Benicia	 Header.

EXHIBITOR.	Address.	Articles Exhibited.
Benicia Agricultural W'ks.	Benicia	Saw frame.
Studebaker Bros.	Sacramento	Display of buggy tops.
A. Doble	San Francisco	Refined cast steel, manufactured by Tirth & Son.
A. Doble	San Francisco	Black Diamond silver tool steel.
A. Doble	San Francisco	Wright's picks and pick eyes.
N. W. Spaulding	San Francisco	Chisel bit.
Pacific Saw Mfg Co.	San Francisco	The Boss wood saw.
Pacific Saw Mfg Co.	San Francisco	Pruning saw, adjustable blade.
Pacific Saw Mfg Co.	San Francisco	C. B. Paul's files.
W. H. Murray	San Francisco	Model of the Hercules dredger, built by the Golden State and Miners' Iron Works.
W. H. Murray	San Francisco	Barb wire fencing (Bush's patent).
Pacific Saw Mfg Co.	San Francisco	Movable blade.
W. McAlister	San Francisco	Model breakwater for levee dams.
G. G. Wickson & Co.	San Francisco	Creamery engine.
G. G. Wickson & Co.	San Francisco	Set of farm tools.
G. G. Wickson & Co.	San Francisco	Tread horse-power.
Judson Mfg Co.	San Francisco	Display of tacks.
L. M. Potter	Sacramento	Potter's wire gate for barb wire fence.
Joseph Budde	San Francisco	Patent water-closets, stop waste, and surface hoppers.
Pacific Mfg Co.	San Francisco	Lap-welded wrought-iron pipe, with patent lead-lined couplings.
Sims & Morris	San Francisco	Wheelbarrows.
John Herrell	Plymouth	Dried fruit renovator.
Elijah Hickman	Red Bluff	Hickman's improved roller bolster for general use.
Mrs. M. H. Ober	San Francisco	Display of underwear.
Geo. J. Mathersole	Chili Bar	Exhibit of roofing slate.
Geo. J. Mathersole	Chili Bar	Exhibit of slate roofing.
E. W. Melvin	Sacramento	Display of installment goods.
Washington Mfg Co.	San Francisco	Victor extracts.
Washington Mfg Co.	San Francisco	Seagull tea.
Washington Mfg Co.	San Francisco	Beehive yeast powders.
A. A. Van Voorhies & Co.	Sacramento	Display of card horse.
T. H. Harlan	Colusa	Crochet work of Mohair fabric.
S. P. Taylor	San Francisco	Various sizes of Eagle paper bags.
Stoddard Bros.	San Francisco	Damascus creme and poudre.
Stoddard Bros.	San Francisco	Liebig's German Invigorator.
Miss Carrie Murray	San Francisco	Dress stays.
Miss Carrie Murray	San Francisco	Dress extenders.
A. J. Pommer	Sacramento	Embroidery, Domestic sewing machine.
A. J. Pommer	Sacramento	Family sewing, Domestic sewing machine.
A. J. Pommer	Sacramento	Fine white sewing on Domestic sewing machine.
H. A. Hebard	San Francisco	The Love button hole and family sewing machine.
A. S. Hopkins & Bro.	Sacramento	Indurated fiber ware.
Leduc Improvement Co.	San Francisco	Tule life preservers.
Alf. R. Kelly	San Francisco	Kelly's wood stains, all colors.
Palmer Clark	Sacramento	Vigor of Life.
E. C. Mead & Co.	San Francisco	Samples silver cream polish.
E. C. Mead & Co.	San Francisco	White's pie turner.
A. S. Graff	San Francisco	Coal oil lamps.
T. B. Johnson	San Francisco	Special card writing.
John F. Cooper	Sacramento	One grand piano (Mathushek make).
John F. Cooper	Sacramento	Three styles "J," upright pianos (Mathushek make).
John F. Cooper	Sacramento	One style "H," upright piano (Mathushek make).
John F. Cooper	Sacramento	One square orchestral piano (Mathushek make).
John F. Cooper	Sacramento	One Wheelock cabinet grand piano (Mathushek make).
John F. Cooper	Sacramento	Five organs (Chicago cottage make).
John F. Cooper	Sacramento	Two large size orchestrones.
John F. Cooper	Sacramento	Twelve banjos.
John F. Cooper	Sacramento	Five concertinas.
John F. Cooper	Sacramento	Nine accordeons.

NINTH DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.
John F. Cooper	Sacramento	 Six anthropes.
John F. Cooper	Sacramento	 Four ariston organettes.
John F. Cooper	Sacramento	 One bass drum.
John F. Cooper	Sacramento	 Two snare drums.
John F. Cooper	Sacramento	 Twenty violins.
John F. Cooper	Sacramento	 Twenty violin boxes.
John F. Cooper	Sacramento	 Two banjos in boxes.
John F. Cooper	Sacramento	 Music folios.
John F. Cooper	Sacramento	 Piano stools.
John F. Cooper	Sacramento	 Six guitars.
John F. Cooper	Sacramento	 Eighty-four small musical instruments.
George Topping	Sacramento	 Working model of locomotive.
Theo. W. Schwamb	Sacramento	 Two White sewing machines.
Mrs. Belle Quarles	Sacramento	 Dis- play of ideal embroidery (machine made).
Mrs. Belle Quarles	Sacramento	 Ideal embroidery machine.
Fred. Jantzen	San Francisco	 Jantzen stove lamp.
Fred. Jantzen	San Francisco	 Jantzen billiard-table lamp.
Fred. Jantzen	San Francisco	 Jantzen portable lamp.
Fred. Jantzen	San Francisco	 Chicago lamp.
James Linforth	San Francisco	 Bronze statuary and monuments.
The Guittard Mfg Co.	San Francisco	 Teas, coffees, and spices.
The Guittard Mfg Co.	San Francisco	 Perfumery, California manufacture.
The California Slate Co.	San Francisco	 Display of roofing slate.
Dickert & Meyers	Cove Creek, U. T.	 Roll sulphur.
Dickert & Meyers	Cove Creek, U. T.	 Sublimate and fine ground sulphur.
Asa T. Heyden	San Francisco	 Gelatine relief process and photo engr'g.
California Fertilizer Co.	San Francisco	 Dis. of land fertilizer for orchard or field.
Mexican Phos. & Sul. Co.	San Francisco	 Guano fertilizer.
J. Everding & Co.	San Francisco	 California laundry wheaten starch.
J. Everding & Co.	San Francisco	 German granulated soap.
Risdon Iron Works	San Francisco	 Macbeth steel pulley.
The Guittard Mfg Co.	San Francisco	 Cafe des gourmands.
The Guittard Mfg Co.	San Francisco	 Stephane's perfumes, California m'fe.
Bandmann, Nielsen & Co.	San Francisco	 Giant powder, Nos. 1 and 2.
Bandmann, Nielsen & Co.	San Francisco	 Gelatine dynamite.
Bandmann, Nielsen & Co.	San Francisco	 Dynamite gelatine.
Mrs. E. A. Wilson	Temescal	 Object lessons.
Mrs. C. A. Blodgett	Temescal	 Object lessons.
James Gamble	Oakland	 Sections of submarine cables.
Towle Bros. & Co.	Alta	 Wood pulp.
Margaret Leach	Oakland	 Object lessons.
Edith Stone	Oakland	 Object lessons.
Lawrence Valeiga	Temescal	 Object lessons.
Robert Bayley	San Francisco	 Display of paper boxes.
McKim & Orth	Sacramento	 Display of infants' wear.
McKim & Orth	Sacramento	 Display of embroidery material.
Miss M. Hinkson	Sacramento	 One painted satin photograph case.
Mrs. O. W. McGowan	Sacramento	 One glass globe of wax harp and flowers.
Mrs. O. W. McGowan	Sacramento	 One wreath of feather flowers.
Mrs. O. W. McGowan	Sacramento	 One lyre of shavings flowers made of Oregon cedar.
R. E. Gogings	Sacramento	 Display of family medicines.
R. E. Gogings	Sacramento	 Veterinary medical chest.
Rev. John F. Von Herrlich ..	Sacramento	 One silk bedspread, embroidered.
Rev. John F. Von Herrlich ..	Sacramento	 Two silk tidies, embroidered.
Rev. John F. Von Herrlich ..	Sacramento	 One silk painted tidy.
Rev. John F. Von Herrlich ..	Sacramento	 One silk painted wall banner.
Rev. John F. Von Herrlich ..	Sacramento	 One silk painted handkerchief case.
Miss Julia Smith	Sacramento	 One crochet slumber robe.
Crocker & Breuner	Sacramento	 One electro-safety bicycle.
Crocker & Breuner	Sacramento	 One electro-safety bicycle.
Crocker & Breuner	Sacramento	 One 55-inch Columbia light roadster.
Crocker & Breuner	Sacramento	 One 51-inch Columbia light roadster.
Crocker & Breuner	Sacramento	 One 54-inch Columbia light roadster.
Crocker & Breuner	Sacramento	 One 52-inch Victor light roadster.
Crocker & Breuner	Sacramento	 One 42-inch Victor Junior light roadster.
Crocker & Breuner	Sacramento	 One Victor tricycle.
Madame Lee	San Francisco	 Cosmetics and manicure.
G. E. Burwell	Sacramento	 Home-made doughnuts.

NINTH DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.
G. E. Burwell	Sacramento	Home-made crullers.
Whittier, Fuller & Co.	Sacramento	Display of parlor easels.
Whittier, Fuller & Co.	Sacramento	Display of gilt tables.
Whittier, Fuller & Co.	Sacramento	Display of fretwork.
James Forderer	San Francisco	Display of zinc castings.
James Forderer	San Francisco	Display of galvanized ornamental work.
James Forderer	San Francisco	Display of skylights for roofs of buildings.
Cathen, Bell & Co.	San Francisco	Display of Little's chemical fluid.
Cathen, Bell & Co.	San Francisco	Display of sheep dip (non-poisonous).
The W. H. Bone Co.	San Francisco	Display of C. C. liniment.
W. F. Harmon	San Francisco	Display of double spiral bed springs.
Selby Smelt'g and Lead Co.	San Francisco	Display of Standard machine loaded.
Selby Smelt'g and Lead Co.	San Francisco	Display of shotgun cartridges, Chamberlin patent.
Selby Smelt'g and Lead Co.	San Francisco	Exhibition of shot.
Selby Smelt'g and Lead Co.	San Francisco	Display of block tin pipe.
Selby Smelt'g and Lead Co.	San Francisco	Display of lead pipe.
Selby Smelt'g and Lead Co.	San Francisco	Display of bluestone and copperas.
C. E. Grunsky	Sacramento	Display of Maston's reading language and number frame.
William C. Hevener	Sacramento	One 48-inch special Star bicycle.
William C. Hevener	Sacramento	One 44-inch full nickel Ideal bicycle.
Mrs. B. Sinkey	Woodland	One ocean-wave quilt.
J. T. Dufau	San Francisco	One patent packing case for demijohns, bottles, and glassware.
J. T. Dufau	San Francisco	One Davey box fastener.
J. H. Love	San Francisco	Manufactured tablets.
Mrs. M. H. Ober	San Francisco	Display of ladies' underw'r in Union suits.
A. C. Shaw	Sacramento	One Morris upright piano, style "10," Bos.
A. C. Shaw	Sacramento	One Spencer upright piano, style "C," grand, Boston.
A. C. Shaw	Sacramento	One Conover Bros. upright piano, style "2," rosewood case, New York.
A. C. Shaw	Sacramento	Two Conover Bros. upright pianos, style "6," grand, ebonized frames.
A. C. Shaw	Sacramento	One Conover Bros. upright piano, style "6," French walnut.
A. C. Shaw	Sacramento	One Conover Bros. upright piano, style "6," extra ebonized.
A. C. Shaw	Sacramento	One patent piano player.
Mrs. J. L. Brown	Sacramento	One lace apron.
Mrs. H. Works & Co.	San José	Mansfield's capillaris.
Mrs. S. M. Lechleiter	Sacramento	Three banners embroidered in fish scales.
Mrs. S. M. Lechleiter	Sacramento	One handkerchief b'x emb. in fish scales.
Mrs. S. M. Lechleiter	Sacramento	Two cologne bottles emb. in fish scales.
Charles Gibbons Davis	San Francisco	The Wels-back system of incandescent gaslighting.
William C. Hevener	Sacramento	One 38-inch American Ideal bicycle.
William C. Hevener	Sacramento	One 48-inch American Ideal bicycle.
William C. Hevener	Sacramento	One 42-inch American Ideal bicycle.
William C. Hevener	Sacramento	One 34-inch American Ideal tricycle.
William C. Hevener	Sacramento	One 42-inch American Challenge tricycle.
William C. Hevener	Sacramento	One 48-inch, full nickel, Champion bicycle.
William C. Hevener	Sacramento	One 54-inch, full nickel, Champion bicycle.
William C. Hevener	Sacramento	One 50-inch Standard Champion bicycle.
William C. Hevener	Sacramento	One 30-inch Singer Safety Cha'n bicycle.
William C. Hevener	Sacramento	American Rambler Safety bicycle.
William C. Hevener	Sacramento	One Electro Safety bicycle.
William C. Hevener	Sacramento	One Eureka tricycle.
William C. Hevener	Sacramento	One Western Toy tricycle.
William C. Hevener	Sacramento	One chain tricycle.
William C. Hevener	Sacramento	One 50-inch, full nickel, American Champion bicycle.
H. Merwin	Sacramento	Sample broom corn.
Mrs. Geo. C. McMullen	Sacramento	Six jars apple jelly.
Mrs. Geo. C. McMullen	Sacramento	Six jars plum jelly.
Mrs. Geo. C. McMullen	Sacramento	Six jars prune jelly.
Mrs. Geo. C. McMullen	Sacramento	Six jars apricot jelly.
Mrs. Geo. C. McMullen	Sacramento	Six jars pear jelly.
Mrs. Geo. C. McMullen	Sacramento	Six jars peach jelly.

NINTH DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.
J. D. Huffman	Lodi	Artistic figure of Ceres.
Joseph Putman	Clements	Hops.
Isaac Lea	Florin	Mission olives.
Isaac Lea	Florin	Picholine olives.
Isaac Lea	Florin	Dried olives.
Isaac Lea	Florin	Chestnuts.
Isaac Lea	Florin	Licorice root.
E. F. Aiken	Sacramento	Mammoth Tours pumpkins.
E. F. Aiken	Sacramento	Potiron pumpkins.
E. F. Aiken	Sacramento	Custard pumpkins.
E. F. Aiken	Sacramento	Banana pumpkins.
E. F. Aiken	Sacramento	Striped bergine pumpkins.
E. F. Aiken	Sacramento	Large cheese.
E. F. Aiken	Sacramento	Mammoth Chili squash.
E. F. Aiken	Sacramento	Marblehead squash.
E. F. Aiken	Sacramento	Boston marrow squash.
E. F. Aiken	Sacramento	Nest egg gourd.
E. F. Aiken	Sacramento	Sugar trough gourd.
E. F. Aiken	Sacramento	New red China squash.
E. F. Aiken	Sacramento	Early white bush squash.
E. F. Aiken	Sacramento	Perfect gem squash.
E. F. Aiken	Sacramento	Small cocoanut squash.
E. F. Aiken	Sacramento	White pineapple squash.
E. F. Aiken	Sacramento	Essex hybrid squash.
E. F. Aiken	Sacramento	Winter crookneck squash.
E. F. Aiken	Sacramento	Winter crookneck pumpkins.
E. F. Aiken	Sacramento	Salem improved squash.
E. F. Aiken	Sacramento	Turban squash.
E. F. Aiken	Sacramento	Brazil sugar pumpkin.
E. F. Aiken	Sacramento	Early yellow bush squash.
P. M. Artz	Perkins	Yankee squash.
P. M. Artz	Perkins	Green tobacco.
P. M. Artz	Perkins	String beans.
Mrs. L. B. Sutliff	Sacramento	Gourds.
Mrs. L. B. Sutliff	Sacramento	Quinces.
C. T. Adams	Newcastle	Persimmons.
J. P. M. Perham	San Francisco	Vermont maple syrup.
W. H. Murray	San Francisco	Special display of May's models, representing our State in commerce, trade, her manufactures, em- bracing cotton, silk, ramie, jute, kindred resources, both foreign and domestic.
E. Booth	Roseville	Quinces.
H. Foster	Sacramento	Evergreen millet.
C. H. Street & Co.	San Francisco	Display of California products.
B. N. Bugbey	Sutter County	Individual farm exhibit.
Mrs. G. C. McMullen	Sacramento	Grape jelly.
B. N. Bugbey	Sutter County	Yellow tomatoes.
B. N. Bugbey	Sutter County	Red pepper.
B. N. Bugbey	Sutter County	Egyptian corn.
B. N. Bugbey	Sutter County	One bale and six bunches broom corn.
B. N. Bugbey	Sutter County	One sack, two bunches broom corn seed.
Thomas Lovdal	Sacramento	Two bales hops.
Mrs. H. E. Parker	Penryn	Ten jars prune jelly.
Mrs. H. E. Parker	Penryn	Six jars gooseberry jelly.
Mrs. H. E. Parker	Penryn	Six jars gros prune jelly.
Mrs. H. E. Parker	Penryn	Six jars grape jelly.
Mrs. H. E. Parker	Penryn	Six jars black raspberry jelly.
Mrs. H. E. Parker	Penryn	Six jars apricot jelly.
Mrs. H. E. Parker	Penryn	Six jars strawberry jam.
Mrs. H. E. Parker	Penryn	Six jars gooseberry jam.
Mrs. H. E. Parker	Penryn	Six jars grape jam.
Mrs. H. E. Parker	Penryn	Six jars quince jam.
Mrs. H. E. Parker	Penryn	Six jars black raspberry jam.
Mrs. H. E. Parker	Penryn	Six glasses spiced figs.
Mrs. H. E. Parker	Penryn	Fourteen bottles tomato catsup.
G. L. Hunt	Elk Grove	One sack and sheaf black-bearded wheat.
Mrs. C. Murray	San Francisco	Display of olive oil from Quito farm, Santa Clara.

NINTH DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.
Maye Kewen	Sacramento	Apple jelly.
Maye Kewen	Sacramento	Strawberry jam.
Maye Kewen	Sacramento	Spiced peaches.
Maye Kewen	Sacramento	Cherry preserves.
Maye Kewen	Sacramento	Peaches.
J. H. Burnell	San Francisco	Albion ale.
J. H. Burnell	San Francisco	Albion porter.
France Whittaker	San Francisco	Pure lard, free from cotton seed and other adulterations.
W. H. Murray	San Francisco	Natural asphaltum.
S. F. Produce Exchange	San Francisco	Standard of grain for California, for 1888 harvest.
Mattie Bates	Sacramento	Two cotton plants.
N. Wilcox	Sacramento	Display of quinces.
J. Wieland	San Francisco	Display of beer.
J. Wieland	San Francisco	Export beer.
J. Wieland	San Francisco	Draught beer.
Mrs. R. S. Frazee	Sacramento	Rolls (wheat).
Mrs. Geo. Muddox	Sacramento	Bottled chowchow.
Mrs. Geo. Muddox	Sacramento	Bottled pickled olives.
Mrs. Geo. Muddox	Sacramento	Bottled tomato catsup.
Mrs. Geo. Muddox	Sacramento	Bottled tomatoes (canned).
Mrs. Geo. Muddox	Sacramento	Bottled green peas.
Mrs. Geo. Muddox	Sacramento	Bottled egg tomatoes.
Mrs. Geo. Muddox	Sacramento	Bottled popcorn.
Mrs. S. Conrad	Sacramento	One fancy tart.
Mrs. S. Conrad	Sacramento	One coffee cake.
Harry Foster	Sacramento	Japanese persimmons.
J. R. Nickerson	Grass Valley	Cultivated grasses and grain.
P. M. Artz	Sacramento	Green tobacco.
D. F. Fryer	Oroville	Abietine remedies.
Lebenbaum Bros.	San Francisco	Hawley's bar sugar and frosting.
Lebenbaum Bros.	San Francisco	"La Favre" Saragota chips.
Lebenbaum Bros.	San Francisco	California olive oil.
Lebenbaum Bros.	San Francisco	Imported olive oil.
S. N. Stranahan	Nevada City	Sun-dried hops.
Mrs. R. S. Lockett	Perkins	Display of gourds.
Mrs. R. S. Lockett	Perkins	Display of cotton.
J. H. Murray	San Francisco	Dr. Henley's celery, beef, and iron.
C. McCreary & Co.	Sacramento	Superfine shipping flour.
F. V. Flint	Sacramento	One bale of hops.
Mrs. Addie Carter	Sacramento	Pineapple jam.
Mrs. Addie Carter	Sacramento	Orange jam.
Mrs. Addie Carter	Sacramento	Lemon jam.
Mrs. Addie Carter	Sacramento	Plum jam.
Mrs. Addie Carter	Sacramento	Currant jam.
Liebenbaum Bros.	San Francisco	California plum pudding sauce.
Liebenbaum Bros.	San Francisco	Display of fancy groceries.
Mrs. Addie Carter	Sacramento	Six jars of strawberry jam.
Mrs. Addie Carter	Sacramento	Six jars of orange jelly.
Mrs. Addie Carter	Sacramento	Six jars of plum jelly.
Mrs. Addie Carter	Sacramento	Peach pickles.
Mrs. Addie Carter	Sacramento	Pear pickles.
Mrs. Addie Carter	Sacramento	Grape pickles.
Mrs. George Muddox	Sacramento	Bottle of chowchow.
J. E. Camp	Perkins	One bale of hops.

GOLD MEDAL ENTRIES.

EXHIBITOR.	Address.	Articles Exhibited.
Mrs. M. H. Ober	San Francisco	Most meritorious exhibit of ladies' and children's underwear and corsets.

PREMIUMS AWARDED—1888.

STATE AGRICULTURAL SOCIETY.

107

FIRST DEPARTMENT.

LIVE STOCK.	Name of Owner.	Address.	Name of Animal.	Award.
CLASS I—THOROUGHBRED HORSES.				
<i>Stallions.</i>				
Best four years old and over.....	John Mackey.....	Sacramento.....	Midlothian.....	 \$40 00
Second best.....	T. G. Jones.....	Santa Rosa.....	Three Cheers.....	 20 00
Best two years old.....	J. K. Newton.....	San Francisco.....	Fergus 2d.....	 20 00
Second best.....	J. K. Newton.....	San Francisco.....	Friday.....	 10 00
Best one year old.....	L. U. Shippee.....	Stockton.....	Fellowcharm.....	 15 00
Second best.....	L. U. Shippee.....	Stockton.....	Major Bun.....	 7 50
<i>Mares.</i>				
Best four years old and over, with colt.....	Alice M. Cutfler.....	Sacramento.....	Lady Stacy.....	 40 00
Second best.....	Frank Lowell.....	Sacramento.....	Lily H.....	 20 00
Best two years old.....	L. U. Shippee.....	Stockton.....	Agnes B.....	 11 25
Best one year old.....	L. U. Shippee.....	Stockton.....	Whisban.....	 7 50
Second best.....	L. U. Shippee.....	Stockton.....	Falsalara.....	.....
<i>Families other than Thoroughbred.</i>				
Best stallion and five of his colts.....	J. A. McCloud.....	Stockton.....	Mt. Vernon and colts.....	 50 00
Best dam and two of her colts.....	E. Topham.....	Milpitas.....	Lady Nutwood and colts.....	 40 00
CLASS II—STANDARD TROTTERS.				
<i>Stallions.</i>				
Best four years old and over.....	H. S. Beals.....	Sacramento.....	Berlin.....	 40 00
Second best.....	F. H. Burke.....	Menlo Park.....	Bros.....	 20 00
Best three years old.....	Cook Stock Farm.....	Danville.....	Charles Derby.....	 30 00
Second best.....	J. Donnelly.....	San Mateo.....	Grand.....	 15 00
Best two years old.....	E. Topham.....	Milpitas.....	Nut Grove.....	 20 00
Second best.....	H. S. Beals.....	Sacramento.....	Billy Irwin.....	 10 00
Best one year old.....	R. A. Robinson.....	Sacramento.....	Bozaro.....	 15 00
Second best.....	J. A. McCloud.....	Stockton.....	Billy Vernon.....	 7 50
Best stallion under one year.....	B. E. Harris.....	San Francisco.....	Brentwood.....	 10 00
Second best.....	G. W. Hancock.....	Sacramento.....	.....	..... 5 00

FIRST DEPARTMENT—Continued.

Live Stock.	Name of Owner.	Address.	Name of Animal.	Award.
<i>Mares.</i>				
Best gelding.....	B. E. Harris.....	San Francisco.....	Harry Mc.....	\$40 00
Second best.....	J. H. Martin.....	Woodland.....	Shiloh.....	20 00
Best four years old and over.....	W. F. Smith.....	Sacramento.....	Belle Blanche.....	40 00
Second best.....	Ira Pierce.....	San Francisco.....	Trix.....	20 00
Best two years old.....	Geo. M. French.....	Stockton.....	Kitty Vernon.....	20 00
Second best.....	Geo. Buckman.....	Sacramento.....	Amber.....	10 00
Best one year old.....	G. W. Hancock.....	Sacramento.....	Lady Guy.....	10 00
Second best.....	B. E. Harris.....	San Francisco.....	Lorena.....	5 00
Best suckling colt.....	W. F. Smith.....	Sacramento.....	Albina De Mer.....	7 50
<i>Stallions.</i>				
Best four years old and over.....	T. C. Snider.....	Washington.....	Corsair.....	40 00
Second best.....	R. Seale.....	Shasta.....	Elmo, Jr.....	20 00
Best three years old.....	Hugh Casey.....	Sacramento.....	Peerless.....	15 00
Second best.....	Mrs. W. C. Stahl.....	Pleasant Grove.....	Sunrise.....	20 00
Best two years old.....	W. F. Smith.....	Sacramento.....	Berlin Prince.....	10 00
Second best.....	Henry Klemp.....	Pleasant Grove.....	Nibs.....	15 00
Best one year old.....	N. Yost.....	Sacramento.....	Morgan.....	7 50
Best suckling colt.....	G. W. Hancock.....	Sacramento.....	Easter Wilkes.....	10 00
Second best.....	A. D. Miller.....	Walsh's Station.....	Harry Thorp.....	5 00
Best roadster, gelding.....	W. M. Billups.....	Colusa.....	E. C. Pert.....	40 00
Second best.....	Miss Nellie J. Ryan.....	Sacramento.....	Hollywood.....	20 00
<i>Mares.</i>				
Best four years old and over.....	Dr. C. E. Pinkham.....	Sacramento.....	Crescent.....	40 00
Second best.....	B. E. Harris.....	San Francisco.....	Fearless.....	20 00
Best three years old.....	J. A. McCloud.....	Stockton.....	Grace Vernon.....	30 00
Second best.....	A. D. Miller.....	Walsh's Station.....	H B L.....	15 00
Best two years old.....	J. A. McCloud.....	Stockton.....	Miss Vernon.....	20 00
Second best.....	A. D. Oakley.....	Sacramento.....	Bonnie O.....	10 00
Best one year old.....	T. C. Snider.....	Washington.....	Adelia.....	10 00
Second best.....	Mrs. W. C. Stahl.....	Pleasant Grove.....	Frances.....	5 00

CLASS III—ROADSTERS.

SPECIAL PREMIUMS.					
For roadster, gelding	P. J. Shafter	Olema	Viking	40 00	
CLASS IV—CARRIAGE TEAMS.					
Best matched span of carriage horses, owned and used as such by one person*	John Garrity	San Francisco	Laura and Rodger	25 00	
Second best					
CLASS V—ROADSTER TEAMS.					
Best double team roadsters, owned and used as such by one person	Dave Eisenman	San Francisco	Success and May	40 00	
Second best	Ira Pierce	San Francisco	Vengeance and Setting Sun	20 00	
CLASS VI—HORSES OF ALL WORK.					
<i>Stallions.</i>					
Best four years old and over	W. E. Comstock	Pleasant Grove	Maje	40 00	
Second best	George Hack	Freeport	Peacock	20 00	
Best three years old	D. R. Hunt	Freeport	Emperor	30 00	
Second best	Theo. Skillman	Petaluma	Tom Cooper, Jr.	15 00	
Best two years old	P. Russell	Brighton	Celtem	20 00	
Second best	J. A. McCloud	Stockton	Johnny Vernon	10 00	
Best one year old	Joseph Heintz	Sacramento	Suby	15 00	
Second best	D. G. Tilton	Nicolaus	D G T	7 50	
Best under one year	Jacob Heintz	Sacramento	Major	10 00	
Second best	D. G. Tilton	Nicolaus	Daylight	5 00	
<i>Mares.</i>					
Best four years old and over, with colt	W. E. Comstock	Pleasant Grove	Lena Leinster and colt	40 00	
Second best	D. G. Tilton	Nicolaus	Nellie and colt	20 00	
Best four years old and over	D. G. Tilton	Nicolaus	Maudie	30 00	
Second best	A. D. Miller	Walsh Station	Lacy Gray	15 00	
Best three years old	A. D. Miller	Walsh Station	Jeanette	20 00	
Second best	R. J. McKenzie	Nicolaus	Daisy	10 00	
Best two years old	Robert Gourlie	Freeport	Sallie	15 00	
Second best	W. E. Comstock	Pleasant Grove	Topsy	7 50	
Best one year old	Robert Gourlie	Freeport	Nellie Heinrich	10 00	
Second best	A. D. Miller	Walsh Station	Nellie	5 00	
Best suckling colt	W. E. Comstock	Pleasant Grove	Maudie	10 00	
Second best	H. H. Wilson	Nicolaus	Myrtle	5 00	

* Premium not awarded, as owner would not permit team to be weighed.

FIRST DEPARTMENT—Continued.

LIVE STOCK.	Name of Owner.	Address.	Name of Animal.	Award.
CLASS VII—DRAFT HORSES—NORMANS.				
<i>Stallions.</i>				
Best four years old and over.	Wm. Curtis	Sacramento	Vivien	\$40 00
Best three years old.	H. Wilsey	Petaluma	Attila	22 50
Best two years old.	F. B. Chandler	Elmira	Frank Pixley	20 00
Second best.	H. Wilsey	Petaluma	Durand	15 00
Best one year old.	F. B. Chandler	Elmira	Shasta	14 25
Best under one year.	F. B. Chandler	Elmira	Ko Ko	7 50
<i>Mares.</i>				
Best four years old and over, with colt.	F. B. Dodge	Binghampton	Maggie and colt	30 00
Best four years old and over.	F. B. Chandler	Elmira	Biche	22 50
Best suckling mare colt.	F. B. Dodge	Binghampton	Magnolia	7 50
CLASS VIII—PERCHERONS.				
<i>Stallions.</i>				
Best stallion four years old and over.	John Seaward	Wheatland	Luneyville	40 00
Second best.	Theo. Skillman	Petaluma	Hercule	20 00
CLASS IX—CLYDESDALES.				
<i>Stallions.</i>				
Best four years old and over.	J. Roberts	Irvington	Duke	30 00
Best two years old.	J. Roberts	Irvington	Prince	20 00
Second best.	H. Wilsey	Petaluma	Lord McDuff, Jr.	15 00
Best one year old.	J. Roberts	Irvington	Jubilee	11 25
Best under one year.	J. Roberts	Irvington	Plunger	7 50
<i>Mares.</i>				
Best four years old and over, with colt.	J. Roberts	Irvington	Jule and colt	30 00
Best four years old and over.	J. Roberts	Irvington	Damsel	22 50
Best three years old.	J. Roberts	Irvington	Dolly	18 75

CLASS X—DRAFT HORSES, OTHER THAN NORMANS, PERCHERONS, OR CLYDESDALES.

Stallions.

Best four years old and over.....	Robert Orr.....	Hollister.....	Pioneer.....	40 00
Second best.....	J. Moddison.....	Washington.....	Young Donald Dinmie.....	20 00
Best three years old.....	Robert Orr.....	Hollister.....	Salisbury.....	30 00
Second best.....	R. J. Merkeley.....	Sacramento.....	Vandee, Jr.....	15 00
Best two years old.....	R. J. Merkeley.....	Sacramento.....	Victor.....	20 00
Second best.....	John Seaward.....	Wheatland.....	Brilliant.....	15 00
Best one year old.....	C. Heisen.....	Sacramento.....	Prince.....	15 00
Second best.....	J. Grubbs.....	Oroville.....	Bertem, Jr.....	7 50
Best under one year.....	C. Heisen.....	Sacramento.....	Champion.....	7 50

Mares.

Best mare four years old and over, with colt.....	R. J. Merkeley.....	Sacramento.....	Fanchon and colt.....	40 00
Second best.....	C. Heisen.....	Sacramento.....	Daisy and colt.....	20 00
Best one year old.....	R. J. Merkeley.....	Sacramento.....	Nellie.....	7 50
Best under one year.....	R. J. Merkeley.....	Sacramento.....	Queen.....	7 50

CLASS XI—SADDLE HORSES.

Best saddle horse (mare or gelding).....	B. E. Harris.....	San Francisco.....	Allan.....	20 00
Second best.....	J. B. Haggin.....	San Francisco.....	Hancock.....	10 00

CLASS XII—SWEEPSTAKES.

Best stallion.....	Cook Stock Farm.....	Danville.....	Baron Hilton (584) (Cleve'd Bay).....	100 00
Best mare.....	W. F. Smith.....	Sacramento.....	Victorine (standard).....	100 00

CLASS XIII—JACKS, JENNIES, AND MULES.

Second best jack four years old and over.....	S. Parker.....	Rocklin.....	Richard Fox.....	20 00
Best jack two years old.....	Levi Carter.....	Ceres.....	Washington Eclipse, Jr.....	15 00
Best mule two years old.....	H. Klemp.....	Pleasant Grove.....	Lize.....	18 75
Best one year old.....	H. Klemp.....	Pleasant Grove.....	Nell.....	15 00

SPECIAL—CLEVELAND BAY AND FRENCH COACH.

Best stallion four years old and over.....	Cook Stock Farm.....	Danville.....	Royal Studley (Cleveland Bay).....	40 00
Second best.....	Theo. Skillman.....	Petaluma.....	Vindicator (French Coach).....	20 00
Best three years old.....	Cook Stock Farm.....	Danville.....	General (Cleveland Bay).....	22 50

FIRST DEPARTMENT—Continued.

CATTLE.

Live Stock.	Name of Owner.	Address.	Name of Animal.	Award.
CLASS I—DURHAMS.				
<i>Bulls.</i>				
Best three years old and over.....	C. Younger & Son.....	San José.....	3d Kirklevington of Forest Home	 \$40 00
Second best.....	Wilfred Page.....	Penn's Grove.....	Mugwump.....	 20 00
Best two years old.....	Wilfred Page.....	Penn's Grove.....	Rogue.....	 22 50
Best one year old.....	C. Younger & Son.....	San José.....	26th Kirklevington of F. H.	 20 00
Second best.....	Wilfred Page.....	Penn's Grove.....	Belt.....	 10 00
Best bull calf.....	P. S. Childs.....	Davisville.....	Red Prince 2d.....	 15 00
Second best.....	Wilfred Page.....	Penn's Grove.....	Gilt Edge.....	 7 50
<i>Cows.</i>				
Best three years old and over.....	Wilfred Page.....	Penn's Grove.....	Maita.....	 40 00
Second best.....	Bridgford & Mulligan.....	Colusa.....	Manunga.....	 20 00
Best two years old.....	Wilfred Page.....	Penn's Grove.....	Christmas Eve.....	 30 00
Second best.....	C. Younger & Son.....	San José.....	Jessie Maynard 4th.....	 15 00
Best one year old.....	Bridgford & Mulligan.....	Colusa.....	Manunga 2d.....	 20 00
Second best.....	P. Peterson.....	Sites.....	Ruby B.....	 10 00
Best heifer calf.....	C. Younger & Son.....	San José.....	Oxford Rose 12th.....	 15 00
Second best.....	P. S. Childs.....	Davisville.....	Red Rose.....	 7 50
<i>Herd.</i>				
Best over two years old.....	P. S. Childs.....	Davisville.....	Kirklevington Oxford Duke and four cows.....	Silver pitcher. 30 00
Best under two years old.....	P. Peterson.....	Sites.....	Syoc and four cows.....	
Best bull of any age.....	C. Younger & Son.....	San José.....	3d Kirklevington of Forest Home	 50 00
Best cow of any age.....	Bridgford & Mulligan.....	Colusa.....	Manunga 2d.....	 50 00
CLASS II—JERSEY AND GUERNSEY.				
<i>Bulls.</i>				
Best three years old and over.....	Levi Carter.....	Ceres.....	Earl of Mameluke.....	 40 00
Second best.....	H. S. Sargent.....	Stockton.....	Waterman.....	 20 00
Best two years old.....	A. L. Nichols.....	Sacramento.....	Gladstone.....	 30 00
Second best.....	Wm. Johnston.....	Richland.....	Dick.....	 15 00

Best one year old.....	W. C. Smith.....	Florin.....	King of Y. B.....	20 00
Second best.....	Wm. Johnston.....	Richland.....	Joe.....	10 00
Best bull calf.....	H. S. Sargent.....	Stockton.....	Aloha.....	15 00
Second best.....	L. F. Eaton.....	Florin.....	Black Bart.....	7 50
<i>Cows.</i>				
Best three years old and over.....	W. C. Smith.....	Florin.....	Irene Straatsburgh.....	40 00
Second best.....	Thos. Ward.....	Oakland.....	Lady Maude.....	20 00
Best two years old.....	H. S. Sargent.....	Stockton.....	Ann Platt.....	30 00
Second best.....	Wm. Johnston.....	Richland.....	Beauty 3d.....	15 00
Best one year old.....	W. C. Smith.....	Florin.....	Martha of Florin.....	20 00
Second best.....	Wm. Johnston.....	Richland.....	Ellen Douglass 2d.....	10 00
Best heifer calf.....	W. C. Smith.....	Florin.....	Mona of Florin.....	15 00
Second best.....	J. Askew.....	El Dorado.....	Mountain Pink.....	7 50
<i>Herd.</i>				
Best herd over two years—(Divided premium)	{ J. Askew.....	{ El Dorado.....	{ Silver King and four cows.....	60 00
Best herd under two years.....	{ H. S. Sargent.....	{ Stockton.....		45 00
SWEETSTAKES.				
Best bull, any age.....	T. Ward.....	Oakland.....	Billy Ralston.....	50 00
Best cow, any age.....	H. S. Sargent.....	Stockton.....	Daisy W.....	37 50
CLASS IV.—AYRSHIRES.				
<i>Bulls.</i>				
Best two years old.....	Geo. Bement & Son.....	San Pablo.....	Lord Faxon.....	22 50
Best one year old.....	Geo. Bement & Son.....	San Pablo.....	Red Mikado.....	15 00
Second best.....	Geo. Bement & Son.....	San Pablo.....	Hotspur.....	7 50
Best bull calf.....	Geo. Bement & Son.....	San Pablo.....	Express.....	11 25
<i>Cows.</i>				
Best three years old and over.....	Geo. Bement & Son.....	San Pablo.....	Sybilla.....	30 00
Second best.....	Geo. Bement & Son.....	San Pablo.....	Highland Mary.....	15 00
Best two years old.....	Geo. Bement & Son.....	San Pablo.....	Ethelberta.....	22 50
Best one year old.....	Geo. Bement & Son.....	San Pablo.....	Paxonia.....	15 00
Best heifer calf.....	Geo. Bement & Son.....	San Pablo.....	Fron Frou.....	11 25
Second best.....	Geo. Bement & Son.....	San Pablo.....	Highland Beauty.....	5 67
Best herd.....	Geo. Bement & Son.....	San Pablo.....	Lord Faxon and cows.....	45 00

FIRST DEPARTMENT—Continued.

LIVE STOCK.	Name of Owner.	Address.	Name of Animal.	Award.
SWEETSTAKES.				
Best bull of any age.....	Geo. Bement & Son	San Pablo	Lord Faxon	\$37 50
Best cow of any age.....	Geo. Bement & Son	San Pablo	Sybilla	37 50
CLASS V—HEREFORDS.				
<i>Bulls.</i>				
Best two years old.....	J. L. McCracken	Auburn	Prince	22 50
Best one year old.....	J. L. McCracken	Auburn	Howard	15 00
Best calf	J. L. McCracken	Auburn	Gay Lad	11 25
<i>Cows.</i>				
Best three years old.....	J. L. McCracken	Auburn	Mabel	30 00
Second best.....	J. L. McCracken	Auburn	Eva S.	15 00
Best one year old	J. L. McCracken	Auburn	Pair Maid	15 00
Second best.....	J. L. McCracken	Auburn	Lida	7 50
Best heifer calf	J. L. McCracken	Auburn	Lily	11 25
Second best.....	J. L. McCracken	Auburn	Kitty	5 65
<i>Herd.</i>				
Best herd.....	J. L. McCracken	Auburn	Prince and four cows	45 00
SWEETSTAKES.				
Best bull, any age.....	J. L. McCracken	Auburn	Prince	37 50
Best cow, any age.....	J. L. McCracken	Auburn	Eva S.	37 50
CLASS VI—HOLSTEINS.				
<i>Bulls.</i>				
Best three years old and over.....	F. H. Burke	Menlo Park.....	Sedro	40 00
Second best.....	Leland Stanford	San Francisco	Nadine Veeuan	20 00
Best two years old	F. H. Burke	Menlo Park	Von Moltke	22 50
Best one year old	Leland Stanford	San Francisco	Montague	20 00
Second best.....	F. H. Burke	Menlo Park.....	King of Menlo	10 00
Best bull calf	Leland Stanford	San Francisco	Osuno	15 00
Second best.....	F. H. Burke	Menlo Park.....	El Cuervo Netherland	7 50

Cows.

Best cow three years old and over	Leland Stanford	San Francisco	Pietje Piersma	40 00
Second best	F. H. Burke	Menlo Park	Sylpha	20 00
Best two years old	Leland Stanford	San Francisco	Ledo	30 00
Second best	F. H. Burke	Menlo Park	Ontaretta	15 00
Best one year old	F. H. Burke	Menlo Park	Belanga	20 00
Second best	Leland Stanford	San Francisco	Mecox	10 00
Best heifer calf	Leland Stanford	San Francisco	Ojinegro	15 00
Second best	F. H. Burke	Menlo Park	Bentje Lincoln	7 50

Heid.

Best of any age	Leland Stanford	San Francisco	Nadine Veeman and four cows	Silver pitcher.
Best bull of any age	F. H. Burke	Menlo Park	Sedro	50 00
Best cow of any age	Leland Stanford	San Francisco	Pansyne	50 00

CLASS VIII—GRADED.

Best cow three years old and over	W. Tryon	Sacramento	Jersey	22 50
Best cow two years old	W. Tryon	Sacramento	Pet	7 50
Best cow one year old	P. H. Murphy	Brighton	Red Belle	5 00
Best heifer calf	W. Tryon	Sacramento	Beauty	5 00

CLASS IX—HERD SWEETSTAKES.

Best milk herd	Leland Stanford	San Francisco	Nadine Veeman (4404) and four cows (Holsteins)	Silver pitcher.
Best beef herd	P. S. Childs	Davisville	Kirklevington Oxford (3672) and four cows (Durhams)	\$100 00
Best milch cow of any age or breed	Leland Stanford	San Francisco	Pansyne. Record: seven days milking, 356 lbs. 14 oz.	30 00
Second best	F. H. Burke	Menlo Park	Sylpha. Record: seven days milking, 302 lbs. 3 oz.	20 00

First Department—Continued.
SHEEP.

LIVE STOCK.	Name of Owner.	Address.	Name of Animal.	Award.
CLASS I—SPANISH MERINO.				
Best ram two years old and over	F. Bullard	Woodland	King George	\$22 50
Best ram one year old and under two	F. Bullard	Woodland	Glingstone	16 88
Best three ram lambs	F. Bullard	Woodland		16 88
Best pen of not less than five ewes, two years old and over	F. Bullard	Woodland		16 88
Best pen of not less than five ewes, one year old and under two	F. Bullard	Woodland		16 88
Best pen of five ewe lambs	F. Bullard	Woodland		16 88
Best ram and five of his lambs	F. Bullard	Woodland		22 50
CLASS II—FRENCH MERINO.				
Best ram two years old and over	James Roberts	Irvington	Fernando	22 50
Best ram one year old and under two	James Roberts	Irvington	Non Pier	16 88
Best three ram lambs	James Roberts	Irvington		16 88
Best pen of not less than five, two years old and over	James Roberts	Irvington		16 88
Best pen of not less than five, one year old and under two	James Roberts	Irvington		16 88
Best ram and five of his lambs	James Roberts	Irvington	Fernando and five lambs.	22 50
CLASS IV—LEICESTERSHIRE.				
Best ram of any age	C. Younger & Son.	San José	Just Right	15 00
Best pen of ewes, not less than five	C. Younger & Son.	San José		15 00
Best ram and five of his lambs	C. Younger & Son.	San José	Just Right and five lambs	15 00
CLASS V—SHROPSHIRE.				
Best ram of any age	J. H. Glide	Sacramento	Jumbo	20 00
Second best	A. Smith	Redwood	Royal Duke	10 00
Best pen of ewes, not less than five	A. Smith	Redwood		15 00
Best pen of not less than five ewe lambs	A. Smith	Redwood		16 88
Best three ram lambs	A. Smith	Redwood		16 88
Best ram and five of his lambs	A. Smith	Redwood		15 00
SWEEPSTAKES.				
Best ram of any age or breed, and five of his lambs	F. Bullard	Woodland	King George (Spanish merino)	50 00

ANGORA GOATS.

Best buck, two years and over	Thomas Harlan	Williams	Governor Helm	25 00
Second best	J. Weyand	Little Stony P. O.	Angelo	12 50
Best buck under two years	T. H. Harlan	Williams		15 00
Second best	J. Weyand	Little Stony		6 50
Best pen of not less than three does, two years and over	T. H. Harlan	Williams		25 00
Second best	J. Weyand	Little Stony		12 50
Best pen under two years old	T. Harlan	Williams		15 00
Second best	J. Weyand	Little Stony		7 50
<i>Graded.</i>				
Best pen of three does, two years old and over	T. Harlan	Williams		10 00
Second best	J. Weyand	Little Stony		7 50
<i>Herd.</i>				
Best herd of ten, any age or breed	T. Harlan	Williams		30 00
Second best	J. Weyand	Little Stony		15 00

SWINE.

LIVE STOCK.	Name of Owner.	Address.	Name of Animal.	Award.
CLASS I—BERKSHIRE.				
Best boar two years old and over	A. Smith	Redwood City	Redwood Duke	\$20 00
Second best	Wm. Jacobs	Sacramento	Bismarek	10 00
Best boar one year old and under two	A. Smith	Redwood City	Piploe	15 00
Second best	T. Waite	Perkins	Brighton	7 50
Best boar six months old and under one year	A. Smith	Redwood City	Redwood Duke 2d	10 00
Second best	T. Waite	Perkins	Dan Corbett	5 00
Best breeding sow two years old and over	W. S. Jacobs	Sacramento	Pino 5th	20 00
Second best	A. Smith	Redwood City	Redwood Lass	10 00
Best sow one year old and under two years	A. Smith	Redwood City	Redwood Sallie 3d	15 00
Second best	W. S. Jacobs	Sacramento	Belle of Pino I	7 50
Best sow six months old and under one year	T. Waite	Perkins	Brighton Lass	10 00
Second best	A. Smith	Redwood City	Red Sallie 6th	5 00
Best sow and six pigs under three months old	A. Smith	Redwood City	Redwood Lass and six pigs	20 00
Second best	T. Waite	Perkins	Redwood Belle and six pigs	10 00
Best pair of pigs under six months	A. Smith	Redwood City	Red Duke 10th and Red Sallie 10th	15 00
Second best	W. Jacobs	Sacramento	Duke and Duchess Pino 5th	7 50

FIRST DEPARTMENT—Continued.

LIVE STOCK.	Name of Owner.	Address.	Name of Animal.	Award.
CLASS II—BESSIE.				
Best boar two years old and over	Geo. Bement & Son	San Pablo	Tyler	\$15 00
Best boar six months old and under one year	Geo. Bement & Son	San Pablo	Josie	7 50
Best breeding sow two years old and over	Geo. Bement & Son	San Pablo	Belle Hewitt	15 00
Best sow one year old and under two years	Geo. Bement & Son	San Pablo	Nan Hewitt	11 25
Best sow six months old and under one year	Geo. Bement & Son	San Pablo .....	.....	7 50
Best pair of pigs under six months	Geo. Bement & Son	San Pablo .....	.....	11 25
CLASS III—POLAND-CHINA.				
Best boar two years old and over	Paul Sheppa	Batavia	Bismarck	22 50
Best boar six months old and under one year	P. H. Murphy	Brighton	Young Samson	7 50
Best sow six months old and under one year	P. H. Murphy	Brighton	Black Beauty	7 50
Best pair of pigs under six months	Paul Sheppa	Batavia .....	.....	11 25
SWEETSTAKES.				
Best boar of any age or breed	Andrew Smith	Redwood City	Redwood Duke	30 00
Best sow of any age or breed	Andrew Smith	Redwood City	Redwood Sallie 2d	30 00
Best pen of six pigs under six months	Andrew Smith	Redwood City .....	.....	20 00
Best family—one boar, two sows, six pigs	Andrew Smith	Redwood City .....	.....	25 00

POULTRY.

LIVE STOCK.	Name of Owner.	Address.	Name of Animal.	Award.
LIGHT BRAHMAS.				
Best cock and hen	T. Waite	Perkins .....	.....	\$3 00
Best cockerel and pullet	T. Waite	Perkins .....	.....	3 00
Best breeding pen	T. Waite	Perkins .....	.....	7 50
DARK BRAHMAS.				
Best breeding pen	George E. Duden	Sacramento .....	.....	7 50
LANGSHANS.				
Best cock and hen	T. Waite	Perkins .....	.....	3 00
Best cockerel and pullet	George E. Duden	Sacramento .....	.....	3 00
Best breeding pen	T. Waite	Perkins .....	.....	10 00

BUFF COCHINS.		
Best cockerel and pullet	T. Waite	Perkins
PARTRIDGE COCHINS.		
Best cock and hen	T. Waite	Perkins
Best cockerel and pullet	T. Waite	Perkins
Best breeding pen	T. Waite	Perkins
PLYMOUTH ROCKS.		
Best cock and hen	Geo. E. Duden	Sacramento
Best cockerel and pullet	Geo. E. Duden	Sacramento
Best breeding pen	T. Waite	Perkins
BROWN LEGHORNS.		
Best cock and hen	T. Waite	Perkins
Best cockerel and pullet	T. Waite	Perkins
Best breeding pen	T. Waite	Perkins
WHITE LEGHORNS.		
Best cock and hen	Geo. E. Duden	Sacramento
Best cockerel and pullet	Geo. E. Duden	Sacramento
Best breeding pen	H. L. Nichols	Sacramento
WHITE-FACED BLACK SPANISH.		
Best cock and hen	E. B. Robinson	Sacramento
Best cockerel and pullet	E. B. Robinson	Sacramento
Best breeding pen	E. B. Robinson	Sacramento
HOUDANS.		
Best cock and hen	T. Waite	Perkins
Best cockerel and pullet	T. Waite	Perkins
Best breeding pen	T. Waite	Perkins
SILVER-SPANGLED HAMBURGS.		
Best cock and hen	T. Waite	Perkins
Best cockerel and pullet	T. Waite	Perkins
Best breeding pen	T. Waite	Perkins
POLISH.		
Best cock and hen	T. Waite	Perkins
Best breeding pen	T. Waite	Perkins

FIRST DEPARTMENT—Continued.

Live Stock.	Name of Owner.	Address.	Name of Animal.	Award.
WYANDOTTES.				
Best cock and hen.....	T. Waite.....	Perkins.....	-----	\$3 00
Best cockerel and pullet.....	W. S. Jacobs.....	Sacramento.....	-----	3 00
Best breeding pen.....	Geo. E. Duden.....	Sacramento.....	-----	10 00
BLACK-BREADED RED GAME.				
Best cock and hen.....	T. Waite.....	Perkins.....	-----	3 00
Best breeding pen.....	T. Waite.....	Perkins.....	-----	5 00
BRONZE TURKEYS.				
Best pair.....	T. Waite.....	Perkins.....	-----	7 50
GEESE.				
Best pair of Toulouse geese.....	T. Waite.....	Perkins.....	-----	5 00
Second best pair of Toulouse geese.....	F. H. Burke.....	Menlo Park.....	-----	3 00
ROUEN DUCKS.				
Best pair.....	T. Waite.....	Perkins.....	-----	5 00
Second best pair.....	F. H. Burke.....	Menlo Park.....	-----	3 00
PEKIN DUCKS.				
Best pair.....	T. Waite.....	Perkins.....	-----	5 00

SECOND DEPARTMENT.

MACHINERY, IMPLEMENTS, ETC.

Exhibitor.	Address.	Articles Exhibited.	Award.
CLASS I.—MACHINERY, ENGINES, ETC.			
Pacific Manufacturing Co.	Sacramento	Well pump	\$10 00
Stanton, Thomson & Co.	Sacramento	Machine for manufacturing field or garden fence	\$20 00
Root, Neilson & Co.	Sacramento	Apparatus for raising water for irrigating purposes.	\$20 00
F. A. Huntington	San Francisco	Model centrifugal roller, quartz mill	Honorable mention.
Pacific Saw Manufacturing Co.	San Francisco	Saw gummer	\$2 00
Geo. W. Topping	Sacramento	Steam engine (two horse power), California manufacture.	\$30 00
CLASS II.—AGRICULTURAL MACHINES.			
S. C. H. Agricultural Works	Stockton	Hay press	\$20 00
Stanton, Thomson & Co.	Sacramento	Cider mill and press	Diploma.
Stanton, Thomson & Co.	Sacramento	Lawn mower	Diploma.
A. & A. Heilbron	Sacramento	Hay and straw cutter	Diploma.
Baker & Hamilton	Sacramento	Thrashing machine	\$30 00
Baker & Hamilton	Sacramento	Horse hay rake	\$5 00
Baker & Hamilton	Sacramento	Power corn sheller	Diploma.
Baker & Hamilton	Sacramento	Hand corn sheller	Diploma.
Benicia Agricultural Works	Benicia	Best display of agricultural machinery by any one house, Cal. manuf.	\$50 00
Benicia Agricultural Works	Benicia	Sweep horse power, California manufacture.	\$10 00
CLASS III.—AGRICULTURAL MACHINES.			
Theodore Palm	Sacramento	Derrick for stacking grain	\$10 00
Stanton, Thomson & Co.	Sacramento	Self binding harvester	\$20 00
Stanton, Thomson & Co.	Sacramento	Corn planter, hand power	\$2 00
Stanton, Thomson & Co.	Sacramento	One-horse cultivator	\$5 00
Stanton, Thomson & Co.	Sacramento	Hay-pitching machine	\$10 00
A. & A. Heilbron	Sacramento	Display of reaping and mowing machine knives	\$5 00
A. & A. Heilbron	Sacramento	Harrow	\$10 00
Truman, Hooker & Co.	San Francisco	Cultivator	\$10 00
Baker & Hamilton	Sacramento	Mowing machine	\$10 00
Baker & Hamilton	Sacramento	Combined reaper and mower	\$5 00
Baker & Hamilton	Sacramento	Potato planter	Diploma.
Baker & Hamilton	Sacramento	Horse hoe	Diploma.
Baker & Hamilton	Sacramento	Double shovel plow	Diploma.
Baker & Hamilton	Sacramento	Grain broadcast sowing machine	\$10 00

SECOND DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.	Award.
Wm. Gutenberger..... Minnesota Thresher Mfg Co. Truman, Hooker & Co.	Sacramento Oakland San Francisco	Field roller and crusher..... Self feeder for thrashing machine..... Wheat drill.....	\$10 00 .....\$10 00 .....\$10 00
CLASS IV—AGRICULTURAL MACHINES.			
John Klees	Sacramento	Fanning mill	\$5 00
Henry Klees	Sacramento	Grain cleaner, Independent	\$10 00
Henry Goossen	Cordella	Farm gate	\$10 00
Stanton, Thomson & Co.	Sacramento	Windmill	\$25 00
S. C. H. Agricultural Works	Stockton	Grain cleaner attachment for thrasher	\$10 00
G. G. Wickson & Co.	San Francisco	Farm feed mill.....	\$10 00
G. G. Wickson & Co.	San Francisco	Beehive without bees	\$3 00
G. G. Wickson & Co.	San Francisco	Agricultural boiler.....	Diploma.
CLASS V—TOOLS AND HOUSEHOLD IMPLEMENTS.			
Stanton, Thomson & Co.	Sacramento	Display of haying and harvesting tools	\$10 00
Huntington, Hopkins & Co.	Sacramento	Cabbage cutter.....	\$2 00
Huntington, Hopkins & Co.	Sacramento	Pruning knives	\$2 50
Huntington, Hopkins & Co.	Sacramento	Pruning shears	\$2 50
Huntington, Hopkins & Co.	Sacramento	Sausage meat cutter and stuffer.....	\$2 00
A. S. Hopkins & Bro.	Sacramento	Clothes-horse to occupy least space	Diploma.
James Linforth	San Francisco	Zimmerman's fruit evaporator or drier	\$20 00
A. & A. Heilbron	Sacramento	Farm road scraper.....	\$5 00
Baker & Hamilton	Sacramento	Garden seed drill	\$2 00
E. W. Melvin	Sacramento	Newbecker washing machine	\$5 00
E. W. Melvin	Sacramento	Empire clothes wringer.....	Diploma.
G. G. Wickson & Co.	San Francisco	Butter worker	Diploma.
G. G. Wickson & Co.	San Francisco	Cheese vat with heater attachment.....	\$10 00
G. G. Wickson & Co.	San Francisco	Display of dairy machinery	\$20 00
G. G. Wickson & Co.	San Francisco	Cheese press	Diploma.
G. G. Wickson & Co.	San Francisco	Milk cooler	Diploma.
Point Reyes and Holstein Dairy Company.....	Point Reyes	Churn	\$5 00
CLASS VI—PLOWES.			
Stanton, Thomson & Co.	Sacramento	Dynamometer	\$5 00
Stanton, Thomson & Co.	Sacramento	Chilled plow	\$5 00
Stanton, Thomson & Co.	Sacramento	Vineyard plow.....	\$5 00

Burge & Donahoe	San Francisco	Sulky plow	\$10 00
Burge & Donahoe	San Francisco	Stubble plow (single wheel)	\$5 00
A. & A. Heilbron	Sacramento	Cast-iron plow	\$5 00
Truman, Hooker & Co.	San Francisco	Steel plow	\$5 00
Truman, Hooker & Co.	San Francisco	One-horse plow	\$5 00
Benicia Agricultural Works	Benicia	Gang plow	\$5 00
Benicia Agricultural Works	Benicia	Subsoil plow	\$25 00
Benicia Agricultural Works	Benicia	Sidehill plow	\$5 00
Benicia Agricultural Works	Benicia	Plow for all purposes	\$5 00
Baker & Hamilton	Sacramento	Sod plow	\$5 00
CLASS VII.—VEHICLES.			
J. W. Wilson	Sacramento	Closed family carriage	Diploma and \$25 00
W. E. Shaw	San Francisco	Pleasure cart	\$10 00
A. Meister	Sacramento	Open family carriage	Diploma and \$25 00
A. Meister	Sacramento	Open buggy	\$10 00
A. Meister	Sacramento	Ladies' phaeton	\$10 00
A. Meister	Sacramento	Two-seated open wagon	\$10 00
A. Meister	Sacramento	Trotting wagon	\$15 00
Charles Ott	Sacramento	Spring market wagon	\$10 00
J. Sovereign	Woodland	Breaking cart	\$10 00
J. Jepsen	Sacramento	Top buggy	\$10 00
Chris. Nielsen	Sacramento	Business wagon	Diploma and \$15 00
Baker & Hamilton	Sacramento	Farm wagon for general purposes	\$10 00
Studebaker Bros.	Sacramento	Carriage or cab for children	\$20 00
Studebaker Bros.	Sacramento	Assortment of carriage material and trimmings	Diploma.
Truman, Hooker & Co.	San Francisco	Track sulky	Diploma. \$5 00

THIRD DEPARTMENT.

TEXTILE FABRICS.

EXHIBITOR.	Address.	Articles Exhibited.	Award.
CLASS I—CLOTHING AND KINDRED TEXTURES.			
F. H. Coffman	Sacramento	Twenty-five yards rag carpet.	\$5 00
David Crise	Escondido	Display of burlap rags (home made).	Silver medal.
D. H. Quinn	Sacramento	Best display of hats and caps	Silver medal.
D. H. Quinn	Sacramento	Best silk hat.	\$5 00
D. H. Quinn	Sacramento	Best soft hat.	\$5 00
Mrs. M. H. Ober	San Francisco.	Best display of ladies and children's underwear.	Dept. medal.
Ingram & Bird	Sacramento	Exhibition of carpets and rugs	\$20 00
Ingram & Bird	Sacramento	Fifteen yards of woolen carpet.	Silver medal.
California Cotton Mills.	East Oakland	Display of towels and table cloths	Silver medal and \$10 00
California Cotton Mills.	East Oakland	Best ten pounds dressed flax.	\$5 00
California Cotton Mills.	East Oakland	Best ten yards cotton duck and toweling	\$25 00
California Cotton Mills.	East Oakland	Best linen sack twine	\$5 00
California Cotton Mills.	East Oakland	Best ten yards kersey	\$5 00
Weinstock & Lubin	Sacramento	Best display of dry goods	\$20 00
Golden Gate Woolen Mills.	San Francisco.	Best Mackinac blanket	\$5 00
Christy & Wise	San Francisco.	Best samples of California wools	Silver medal.
McKim & Orth.	Sacramento	Best stocking yarn	\$3 00
CLASS II—NEEDLE, SHELL, AND WAXWORK.			
Mrs. J. L. Brown	Sacramento	Two embroidered velvet banners	\$3 00
Miss Lizzie F. Mund	Sacramento	One embroidered table scarf, two ends tinsel	\$3 00
Miss Clara Spooner	Ash Valley.	One embroidered piano scarf	\$3 00
Mrs. J. C. Jacka	Sacramento	One embroidered sofa raised wool work	\$2 00
Miss Loretta Bohl	Sacramento	One embroidered handkerchief case	\$3 00
Mrs. J. G. Jackson	San Francisco.	One crochet shawl	\$3 00
Mrs. Hattie Gardiner	Pleasant Valley	One crocheted cape	\$2 00
Mrs. Hattie Gardiner	Pleasant Valley	One lounge afghan	\$3 00
Mrs. Hattie Gardiner	Pleasant Valley	Thirteen varieties ornamental grasses	\$3 00
Mrs. Hattie Gardiner	Pleasant Valley	Display of paper flowers	\$5 00
Mrs. Hattie Gardiner	Pleasant Valley	Display of outlined embroidery	\$1 00
Mrs. Mary Strub	Sacramento	Display of one shell work table	\$2 00
Mrs. R. S. Frazee	Sacramento	One crocheted afghan	\$5 00

Mrs. M. E. Osgood	Sacramento	Three patchwork quilts	\$3 00
Mrs. Sophie Conrad	Sacramento	One crochet bedspread	\$5 00
Mrs. Charles Robin	Sacramento	One embroidered piano cover, applique	\$3 00
Mrs. Charles Robin	Sacramento	One embroidered table scarf, arrasene	\$3 00
Mr. George M. Purnell	Sacramento	One embroidered silk quilt	\$3 00
Mrs. J. W. Cotton	Dixon	One embroidered wall panel	\$5 00
Mrs. M. E. Tryon	Sacramento	One crazy patchwork quilt	\$3 00
Mrs. Theo. Denning	Sacramento	One table scarf, kensington work	\$3 00
Mrs. Theo. Denning	Sacramento	One pair knit mittens	\$2 00
Mrs. Sadie Pearson	Sacramento	One knitted bedspread	\$5 00
Mrs. W. B. C. Brown	Sacramento	One braided pillow and scarf	\$5 00
Misses C. & M. Brothers	Sacramento	Best display of millinery	\$20 00
Misses C. & M. Brothers	Sacramento	Best velvet bonnet	\$5 00
Misses C. & M. Brothers	Sacramento	Best velvet hat	\$5 00
Misses C. & M. Brothers	Sacramento	Best silk bonnet	\$5 00
Misses C. & M. Brothers	Sacramento	Best feathers	\$10 00
Misses C. & M. Brothers	Sacramento	Best artificial flowers	\$10 00
Miss Annie L. Chandler	Nicolaus	One carriage afghan	\$5 00
Miss Annie L. Chandler	Nicolaus	One embroidered toilet set of cushion and bottles	\$5 00
Miss Annie L. Chandler	Nicolaus	Kensington floss on silk	\$5 00
Mrs. W. H. Wright	Sacramento	Best kensington with crewel on wool	\$2 00
Mrs. W. H. Wright	Sacramento	Best knit stockings	\$3 00
Mrs. C. A. Patrick	Sacramento	Best display of children's clothing, California made	\$15 00
M. Kim & Orth	Sacramento	Best display of fancy goods	\$20 00
Mrs. Wm. M. Lyon	Sacramento	Best painting on bolting cloth	\$5 00
Mrs. Wm. M. Lyon	Sacramento	Best surface plush painting	\$5 00
Mrs. Wm. M. Lyon	Sacramento	Best laid plush painting	\$5 00
Mrs. Wm. M. Lyon	Sacramento	Best raised silk work	\$3 00
Mrs. Wm. M. Lyon	Sacramento	Best display of decorative painting on plush, silk velvet, bolting cloth, and linen	\$10 00
Mrs. Hugh Casey	Sacramento	Best needlework picture	\$3 00
Mrs. Ravenna	San Francisco	Best bead work	Diploma
Mrs. O. Summers	Sacramento	Best cotton embroidery	\$3 00
Miss Agnes Hummel	Sacramento	Best embroidery handkerchief	\$2 00
Miss Agnes Hummel	Sacramento	Best embroidery flannel	\$5 00
Mrs. Addie Carter	Sacramento	Best wax flowers	\$1 00
Mrs. Addie Carter	Sacramento	Best bouquet of skeleton leaves	\$3 00
Mrs. E. W. Norris	Sacramento	Best chenille work	\$5 00
Mrs. E. W. Norris	Sacramento	Best plush ribbon work	\$3 00
Mrs. E. W. Norris	Sacramento	Best sofa pillow and cushion	\$5 00
Miss Alfre Watson	Sacramento	Best darned net work	\$2 00
Miss Carrie Davey	Sacramento	Best and finest display of lace by hand	\$10 00
Mrs. O. W. McGowan	Sacramento	Best display of moss work	\$3 00
Mrs. F. A. Arnold	San Francisco	Best embroidered fire screen	\$5 00
Mrs. F. A. Arnold	San Francisco	Best Turkish embroidery	\$3 00

THIRD DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.	Award.
Mrs. F. A. Arnold	San Francisco.	Best ivory painting	-----\$5 00
Mrs. F. A. Arnold	San Francisco.	Luster painting	-----\$5 00
Mrs. F. A. Arnold	San Francisco.	Best Spanish drawn work	-----\$5 00
Mrs. F. A. Arnold	San Francisco.	Best fancy braiding	-----\$3 00
Mrs. F. A. Arnold	San Francisco.	Best embroidered bedspread	-----\$5 00
Mrs. F. A. Arnold	San Francisco.	Best variety of porcelain painting	-----\$5 00
Mrs. F. A. Arnold	San Francisco.	Largest and handsomest display of fancy articles made by a lady	-----\$10 00 -----\$20 00
<i>Special Premiums.</i>			
Mrs. F. A. Arnold	San Francisco	Best piece of embroidery work (President L. U. Shippee)	-----\$20 00
Mrs. F. A. Arnold	San Francisco	Best piece of porcelain painting (Director C. M. Chase)	-----\$20 00
Mrs. H. C. Briggs	Oakland	Best decorative painted fire screen (Director Fred. Cox)	-----\$20 00
Susie V. Staples	El Dorado	Fancy work.	-----Special premium rec.
CLASS II—JUVENILE DEPARTMENT.			
Dora M. Fish	Sacramento	One calico dress (hand made)	-----Special premium rec.
Anna M. Fish	Sacramento	One needlework picture	-----\$5 00
Clarence Ruggles	Sacramento	One frame of paper flowers (wreath)	-----Napkin ring.
Edna Harvey	Sacramento	Best silk quilt.	-----\$5 00
Agnes M. Hopper	Sacramento	One calico dress	-----\$5 00
Bertie Wassermann	Sacramento	One knit stocking purse	-----Napkin ring.
Daisy Wassermann	Sacramento	One crochet chemise yoke.	-----Napkin ring.
Miss Isaacs	Sacramento	One table scarf.	-----\$5 00
Miss Isaacs	Sacramento	One table cover	-----\$3 00
Miss S. J. Hopper	Sacramento	Painted panel (pen drawing)	-----Napkin ring.
CLASS III—PRINTING, LITHOGRAPHING, ETC.			
George W. Hagens.	San Francisco.	Sheet music.	-----Silver medal.
McCabe Lithograph Co.	San Francisco.	Display of lithography and zincograph photo, and relief plate process.	-----Silver medal.

FOURTH DEPARTMENT.

MECHANICAL PRODUCTS.

EXHIBITOR.	Address.	Articles Exhibited.	Award.
CLASS I—MANUFACTURE OF LEATHER, PAPER, AND RUBBER.			
Henry Boeger.....	Redwood City.....	Best display of leather.....	Silver medal.
Alvoda Meza.....	Sacramento.....	One Mexican saddle, home manufacture.....	\$5 00
R. W. Neely.....	Sacramento.....	Best display of men's boots, shoes, and gaiters.....	Silver medal.
R. W. Neely.....	Sacramento.....	Best pair of heavy boots.....	\$5 00
R. W. Neely.....	Sacramento.....	Best pair of dress boots.....	\$5 00
R. W. Neely.....	Sacramento.....	Best pair of gentlemen's dress shoes.....	\$5 00
R. W. Neely.....	Sacramento.....	Best pair of gentlemen's congress gaiters.....	\$5 00
R. W. Neely.....	Sacramento.....	Best pair of ladies' congress gaiters.....	\$3 00
R. W. Neely.....	Sacramento.....	Best pair of ladies' booties.....	\$3 00
James Longshore.....	Sacramento.....	Best exhibit of traveling trunks, bags, and valises.....	Silver medal and \$10 00
S. F. Taylor & Co.....	San Francisco.....	Best general display of paper manufactured in California, not less than two tons.....	\$20 00
A. A. Van Voorhies & Co.....	Sacramento.....	Best one set of patent harness.....	Special premium.
J. Jepsen.....	Napa.....	Best one set of single harness.....	\$10 00
CLASS II—WORKED METALS.			
Mrs. J. L. Baker.....	Sacramento.....	Best display of kitchen utensils, of tin.....	\$5 00
C. W. Goodlard.....	Sacramento.....	Best display of horseshoes, hand made.....	Silver medal.
Huntington, Hopkins & Co.....	Sacramento.....	Best display of general hardware.....	\$20 00
Huntington, Hopkins & Co.....	Sacramento.....	Best display of iron and steel.....	\$10 00
Huntington, Hopkins & Co.....	Sacramento.....	Best display of blacksmithing tools.....	Diploma and \$10 00
Huntington, Hopkins & Co.....	Sacramento.....	Best display of pocket cutlery.....	\$5 00
Huntington, Hopkins & Co.....	Sacramento.....	Best display of wire goods.....	Diploma and \$5 00
Huntington, Hopkins & Co.....	Sacramento.....	Best display of copper work.....	\$10 00
Huntington, Hopkins & Co.....	Sacramento.....	Best display of files.....	\$5 00
Huntington, Hopkins & Co.....	Sacramento.....	Best display of brass work.....	\$10 00
Huntington, Hopkins & Co.....	Sacramento.....	Best display of mill saws.....	\$5 00
Huntington, Hopkins & Co.....	Sacramento.....	Best display of mechanics' tools.....	\$20 00
Huntington, Hopkins & Co.....	Sacramento.....	Best display of horseshoes, Phenix, machine made.....	Silver medal.
Huntington, Hopkins & Co.....	Sacramento.....	Best display of modern building hardware.....	\$20 00
Huntington, Hopkins & Co.....	Sacramento.....	Best display of butchers' supplies and goods.....	Diploma and \$10 00
A. & A. Heilbron.....	Sacramento.....	Hammer designed and manufactured by J. W. Eaton.....	Honorable mention.
J. W. Eaton.....	Placerville.....	John Wright's picks.....	Diploma.
Abner Noble.....	San Francisco.....		

FOURTH DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.	Award.
Pacific Saw Manufacturing Co.	San Francisco	Best display of circular saws	Silver medal.
Selby Lead and Smelting Co.	San Francisco	Best display of shot	Diploma.
Selby Lead and Smelting Co.	San Francisco	Best sample of block tin pipe	Diploma.
Selby Lead and Smelting Co.	San Francisco	Best exhibition of lead pipe	Diploma.
Selby Lead and Smelting Co.	San Francisco	Best exhibition of anti-friction metal	Diploma.
T. Doyle	San Francisco	Best hoof clasp improved beveled horseshoe nail	Diploma.
CLASS III—STOVES, CASTINGS, ETC.			
A. Aiken.	Sacramento	Parlor grate	\$3 00
B. L. Ball	Sacramento	Farm bell	\$5 00
Joseph F. Forderer	San Francisco	Ornamental statuary	\$5 00
C. D. Harvey	San Francisco	Warning furnaces and other apparatus	Silver medal.
Fred. Jantzen	San Francisco	Oil stove	\$5 00
CLASS IV—MUSICAL INSTRUMENTS.			
Antisell Piano Co.	San Francisco	Upright piano	Sil. medal and diploma.
CLASS V—FURNITURE.			
J. D. Huffman	Lodi	Display of California wood	Silver medal.
Fr. Kuehne	Sacramento	Two side tables, inlaid work table	Diploma.
Capital Furniture Co.	Sacramento	Dressing bureau	\$10 00
Capital Furniture Co.	Sacramento	Bookcase	\$5 00
Capital Furniture Co.	Sacramento	Wardrobe	\$10 00
Capital Furniture Co.	Sacramento	School furniture	\$10 00
John Breuner	Sacramento	Lounge	\$5 00
John Breuner	Sacramento	Office chair	\$5 00
John Breuner	Sacramento	Center table	\$5 00
John Breuner	Sacramento	Display of furniture	---
John Breuner	Sacramento	Sick chair or couch	\$5 00
John Breuner	Sacramento	Spring mattress	\$5 00
John Breuner	Sacramento	Display of upholstery	\$10 00
John Breuner	Sacramento	Display of willow furniture	\$10 00
Charles M. Campbell	Sacramento	Best set of bedroom furniture	\$10 00
W. D. Comstock	Sacramento	Best hair mattress	\$5 00
Charles M. Campbell	Sacramento	Best sofa	\$10 00
Charles M. Campbell	Sacramento	Best wool mattress	\$5 00
W. F. Harmon	San Francisco	Best double spiral spring bed	Premium recommen'd.

CLASS VI.—WOODENWARE.

A. S. Hopkins & Bro.	Sacramento	Best display of cedarware	.....	\$5 00
A. S. Hopkins & Bro.	Sacramento	Best display of pineware	.....	\$5 00
A. S. Hopkins & Bro.	Sacramento	Best display of oakware	.....	\$5 00
A. S. Hopkins & Bro.	Sacramento	Best display of willowware	.....	\$10 00
A. S. Hopkins & Bro.	Sacramento	Best display of splitwood baskets	.....	\$3 00
A. S. Hopkins & Bro.	Sacramento	Best display of osier	.....	\$5 00
A. S. Hopkins & Bro.	Sacramento	Best display of woodenware	.....	\$25 00
A. S. Hopkins & Bro.	Sacramento	Best display of broom corn, brooms, and brushes	.....	\$10 00
A. S. Hopkins & Bro.	Sacramento	Best assortment of hair brushes	.....	\$5 00
E. N. Hill	Sacramento	Best assortment of coopers' ware	.....	\$10 00
Whittier, Fuller & Co.	Sacramento	Best inlaid table top	.....	\$5 00
Whittier, Fuller & Co.	Sacramento	Best display of window shades	.....	\$5 00
Theo. W. Schwamb	Sacramento	Best display of gift frames	.....	\$5 00
Theo. W. Schwamb	Sacramento	Best sample of twist moldings	.....	\$5 00
Theo. W. Schwamb	Sacramento	Best display of fancy moldings and scroll sawing	.....	\$5 00

CLASS VII.—ELECTRICAL APPLIANCES,

ETC.

I. X. L. Elastic Truss Company.	San Francisco	I. X. L. Elastic truss	.....	Silver medal.
Waterhouse Electric and Mfg Co.	Hartford, Conn.	Two electric generators and dynamos, thirty incandescent lamps, four voltaic arc lamps, voltmeter, ammeter	.....	Silver medal.
A. C. Shaw	Sacramento	German tellurion (astronomical)	.....	Premium recommen'd.
George Topping	Sacramento	Electric light dynamo, California manufacture	.....	Silver medal.

CLASS VIII.—CHEMICALS.

Capital Soap Company	Sacramento	Best display of soap	.....	Silver medal.
Capital Soap Company	Sacramento	Best display of bleaching soap	.....	Diploma.
Capital Soap Company	Sacramento	Best display of toilet soap	.....	Diploma.
Capital Soap Company	Sacramento	Best display of castile soap	.....	Diploma.
A. S. Hopkins & Bro.	Sacramento	Best display of writing fluid	.....	\$2 00
A. S. Hopkins & Bro.	Sacramento	Best display of blacking	.....	\$2 00
A. S. Hopkins & Bro.	Sacramento	Best display of stove polish	.....	Diploma.
A. S. Hopkins & Bro.	Sacramento	Best display of axlegrease	.....	Diploma.
The Cultivator Manufacturing Co.	San Francisco	Yeast powder (Chief)	.....	Diploma.
The Cultivator Manufacturing Co.	San Francisco	Chocolate, California manufacture	.....	Diploma.
T. W. Jackson	San Francisco	Best display of potash	.....	\$5 00
T. W. Jackson	San Francisco	Best display of caustic soda	.....	Diploma.
T. W. Jackson	San Francisco	Best display of insecticide potash	.....	Diploma.
Selby, Smeltling and Lead Co.	San Francisco	Best bluestone and copperas	.....	Premium recommen'd.
Huetter Bros. & Co.	San Francisco	Best copal varnish	.....	\$5 00
John Reynolds	San Francisco	Best general display of varnishes	.....	Silver medal.
C. H. Street	San Francisco	Best prussiate of potash	.....	\$5 00
	San Francisco	Best display of lubricating petroleum	.....	Diploma.

FOURTH DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.	Award.
Alf. R. Kelly.....	San Francisco.....	Best display of Golden West oil.....	Diploma.
Alf. R. Kelly.....	San Francisco.....	Best display of Neal's carriage paints.....	Diploma.
John Reynolds.....	San Francisco.....	Best display of oil of vitrol, muriatic, and nitric acid.....	Silver medal.
Alf. R. Kelly.....	San Francisco.....	Best display of imperishable paint.....	Diploma.
CLASS IX.—STONEWARE, ETC.			
George Muddox.....	Sacramento.....	Stoneware.....	Diploma.
George Muddox.....	Sacramento.....	Best water pipe of water line.....	Diploma.
George Muddox.....	Sacramento.....	Best samples of drain tile.....	\$5 00
George Muddox.....	Sacramento.....	Samples of roofing.....	\$5 00
George Muddox.....	Sacramento.....	Samples of firebricks.....	\$3 00
George Muddox.....	Sacramento.....	Samples of pressed bricks.....	Diploma.
George Muddox.....	Sacramento.....	Samples of pottery of various kinds.....	Silver medal.
George Muddox.....	Sacramento.....	Best display of stoneware.....	\$10 00
Gladding, McBean & Co.....	Lincoln.....	Display of terra cotta.....	Diploma.
A. Aiken.....	Sacramento.....	Display of flooring tile.....	\$5 00
H. Palmer.....	San Francisco.....	Display of demijohns.....	Diploma.
C. Newman.....	San Francisco.....	Display of glassware.....	\$10 00
C. Newman.....	San Francisco.....	Display of demijohn improved box.....	Premium recommen'd.
Inyo Marble Co.....	San Francisco.....	Display of dressed stone.....	\$5 00
CLASS X.—MINERALS, FOSSILS, ETC.			
Alex. Keller.....	Auburn.....	Suit of fossils of California.....	Silver medal.
Alex. Keller.....	Auburn.....	Best collection of minerals illustrating the geology of California.....	Silver medal.
Alex. Keller.....	Auburn.....	Best suit of crystallized minerals of California.....	Silver medal.
Alex. Keller.....	Auburn.....	Suit of polished stone specimens.....	Premium recommen'd.
H. F. Frye.....	Relief Hill.....	Cabinet of minerals.....	Silver medal.
Nevada County.....	California.....	Exhibit of minerals.....	Premium recommen'd.
Inyo Marble Co.....	San Francisco.....	Variety of marble.....	Premium recommen'd.
CLASS XI.—MARBLE AND GRANITE WORK.			
A. Aiken.....	Sacramento.....	Polished marble.....	\$30 00
A. Aiken.....	Sacramento.....	Statuary, marble mantel.....	Silver medal.
A. Aiken.....	Sacramento.....	Marbleized slate.....	Silver medal.
A. Aiken.....	Sacramento.....	Marbleized iron.....	Silver medal.

FIFTH DEPARTMENT.

AGRICULTURAL PRODUCTS.

Exhibitor.	Address.	Articles Exhibited.	Award.
CLASS I—SILK, COTTON, AND TOBACCO.			
California Cotton Mills	San Francisco.	One bale California cotton	\$20 00
C. H. Street & Co.	San Francisco.	Best display of silk made in California	\$25 00
David Bryan.	Grass Valley	Best display of California tobacco in leaf	\$5 00
CLASS II—FLOUR AND GRAIN.			
J. D. Hoffman	Lodi	Best display of grain in sheaf	\$40 00
John Reith	Union House	Best sample of Royal Australian wheat.	\$10 00
B. N. Bugbey	Sutter County	Best sample of barley	\$5 00
B. N. Bugbey	Sutter County	Best sample of Chevalier barley	\$5 00
B. N. Bugbey	Sutter County	Best bushel of yellow corn	\$5 00
B. N. Bugbey	Sutter County	Best bushel of white corn	\$5 00
C. A. Hull	Union House	Best sample of Chili wheat	\$10 00
Mrs. R. S. Lockett	Perkins	Best exhibit of garden seeds (California production)	\$10 00
C. McCreary & Co.	Sacramento	Best family flour	\$10 00
C. McCreary & Co.	Sacramento	Best baker's flour	\$10 00
CLASS III—VEGETABLES, ROOTS, ETC.			
E. F. Aiken	Sacramento	Best one half peck peppers for pickles	\$3 00
E. F. Aiken	Sacramento	Best six marrow squashes	\$3 00
E. F. Aiken	Sacramento	Best six Hubbard squashes	\$3 00
E. F. Aiken	Sacramento	Best six crookneck squashes	\$3 00
E. F. Aiken	Sacramento	Best peck tomatoes	\$3 00
E. N. Bugbey	Sutter County	Largest pumpkin	\$3 00
E. N. Bugbey	Sutter County	Best three mountain sweet watermelons	\$2 00
E. N. Bugbey	Sutter County	Best three striped watermelons	\$3 00
J. D. Hoffman	Sutter County	Best half peck lima beans, in pod	\$3 00
Chamney Langdon	Lodi	Best six sugar beets	\$3 00
Chamney Langdon	Eureka	Best half bushel white potatoes	\$5 00
Chamney Langdon	Eureka	Best half bushel red potatoes	\$5 00
E. A. Bridgford	Eureka	Best half peck yellow onions	\$3 00
Mrs. Geo. Muldrex	Colusa	Best half peck sweet potatoes	\$5 00
Mrs. Geo. Muldrex	Sacramento	Best six cucumbers	\$2 00
Mrs. Geo. Muldrex	Sacramento	Best half peck cherkins	\$3 00

FIFTH DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.	Award.
Felice Gabrielli	Sacramento	Best twelve parsnips	\$3 00
Felice Gabrielli	Sacramento	Best twelve carrots	\$3 00
Felice Gabrielli	Sacramento	Best six long blood beets	\$3 00
Felice Gabrielli	Sacramento	Best six turnip beets	\$3 00
Felice Gabrielli	Sacramento	Best six drumhead cabbages	\$3 00
Felice Gabrielli	Sacramento	Best six heads red dutch cabbage	\$3 00
Felice Gabrielli	Sacramento	Best three heads of cauliflower	\$3 00
Felice Gabrielli	Sacramento	Best three heads of broccoli	\$3 00
Felice Gabrielli	Sacramento	Best six heads of lettuce	\$2 00
Felice Gabrielli	Sacramento	Best half peck of red onions	\$3 00
Felice Gabrielli	Sacramento	Best half peck of white onions	\$3 00
Felice Gabrielli	Sacramento	Best twelve roots salsify	\$3 00
Felice Gabrielli	Sacramento	Best six stalks celery	\$3 00
Felice Gabrielli	Sacramento	Best dozen sweet corn (green)	\$3 00
Felice Gabrielli	Sacramento	Best three cantaloupes	\$3 00
Felice Gabrielli	Sacramento	Best three muskmelons	\$3 00
Felice Gabrielli	Sacramento	Best half peck white beans	\$3 00
Felice Gabrielli	Sacramento	Best half peck kidney bush beans	\$3 00
Felice Gabrielli	Sacramento	Best half peck field peas (dry)	\$2 00
Felice Gabrielli	Sacramento	Best half peck garden peas (dry)	\$3 00
Felice Gabrielli	Sacramento	Best half peck castor oil beans	\$3 00
Felice Gabrielli	Sacramento	(Greatest variety of peas (dry)	\$3 00
Felice Gabrielli	Sacramento	Three purple egg plants	\$3 00
Felice Gabrielli	Sacramento	Best table of vegetables	\$20 00
J. D. Huffman	Lodi	Best table of vegetables by one person	\$20 00
C. Langdon	Eureka	Best variety Irish potatoes	\$5 00
CLASS IV—FLOWERS, ETC.			
Bell Conservatory Co.	Sacramento	Best and largest collection of flowering plants in bloom	\$20 00
Bell Conservatory Co.	Sacramento	Best collection of ornamental foliage plants	\$20 00
Bell Conservatory Co.	Sacramento	Best display of cut flowers, to be kept fresh during the exhibition, by replacing	\$20 00
Bell Conservatory Co.	Sacramento	Best collection of new and rare plants	\$15 00
Bell Conservatory Co.	Sacramento	Best display of coleus, distinct varieties	\$15 00
Bell Conservatory Co.	Sacramento	Best and most varied exhibit of named varieties of dahlias	\$10 00
Bell Conservatory Co.	Sacramento	Best collection of roses in bloom	\$10 00
Bell Conservatory Co.	Sacramento	Best collection of fuchsias in bloom	\$10 00
Bell Conservatory Co.	Sacramento	Best collection of tuberose	\$10 00
Bell Conservatory Co.	Sacramento	Best collection of pinks	\$10 00

Bell Conservatory Co.	Sacramento.	Best collection of ferns.	.....	\$15 00
Bell Conservatory Co.	Sacramento.	Best display of bouquets.	.....	\$10 00
Bell Conservatory Co.	Sacramento.	Best collection of plants suitable for greenhouse, conservatory, and window culture.	.....	\$15 00
Bell Conservatory Co.	Sacramento.	Best display of hanging baskets, containing plants.	.....	\$10 00
<i>Specials.</i>				
Bell Conservatory Co.	Sacramento.	September 8th, best floral display	.....	\$25 00
Bell Conservatory Co.	Sacramento.	September 13th, best floral display	.....	\$25 00
CLASS V—CHEESE.				
John Burns.	Nicolaus.	Cheese one year old and over.	.....	\$15 00
John Burns.	Nicolaus.	Cheese under one year old.	.....	\$10 00
John Burns.	Nicolaus.	Best display of cheese	.....	Diploma and \$15 00
CLASS VI—BUTTER, BREAD, ETC.				
L. F. Eaton.	Florin.	Best five pounds pure Jersey butter.	.....	The "Jersey Bulletin" gold medal.
James McM. Shafter.	San Francisco.	Best display of butter in rolls.	.....	\$20 00
James McM. Shafter.	San Francisco.	Best tub of firkin butter.	.....	Diploma and \$15 00
American Biscuit Company.	San Francisco.	Best pilot bread.	.....	} Silver medal and dip.
American Biscuit Company.	San Francisco.	Best butter crackers.	.....	
American Biscuit Company.	San Francisco.	Best Boston crackers.	.....	
Miss S. Sullivan.	Sacramento.	Best domestic corn bread.	.....	\$5 00
Mrs. D. DeHull.	Sacramento.	Best soda biscuit.	.....	\$2 00
Mrs. W. H. Wright.	Sacramento.	Best domestic rye bread.	.....	\$5 00
Mrs. D. DeHull.	Sacramento.	Best domestic wheat bread.	.....	\$5 00
Mrs. W. H. Wright.	Sacramento.	Best domestic brown bread.	.....	\$5 00
Mrs. W. H. Wright.	Sacramento.	Best display of domestic bread.	.....	\$10 00
Miss Emma Muddox.	Sacramento.	Best domestic graham bread.	.....	\$5 00
W. F. Peterson.	Sacramento.	Best four loaves baker's bread.	.....	\$3 00
Mrs. D. DeHull.	Sacramento.	Best biscuit.	.....	\$2 00
CLASS VII—SUGAR, CONFECTIONS, ETC.				
Chas. F. Barton.	Sacramento.	Best display of confectionery.	.....	\$10 00
Chas. F. Barton.	Sacramento.	Best general varieties of candies made in hall during fair.	.....	Diploma and \$10 00
Mrs. R. S. Lockett.	Perkins.	Best display of sugar cane.	.....	\$15 00
W. H. Murray.	San Francisco.	Second best display of sugar cane.	.....	\$10 00

SIXTH DEPARTMENT.

FRUITS, PRESERVES, WINES, ETC.

Exhibitor.	Address.	Articles Exhibited.	Award.
CLASS I—GREEN FRUITS.			
S. N. Struahan.	Nevada City	Best display and variety of apples	\$25 00
Dr. A. Chapman	Nevada City	Second best	\$20 00
H. A. Frost.	Dutch Flat.	Third best	\$15 00
W. D. Carpenter	Diamond Springs	Fourth best	\$10 00
Joseph Putman.	Clements	Fifth best	\$5 00
Dr. A. Chapman	Nevada City	Best display and variety of pears	\$25 00
A. C. Gillispie.	Nevada City	Second best	\$20 00
J. Levee	Lowell Hill	Third best	\$15 00
H. A. Frost.	Dutch Flat.	Fourth best	\$10 00
J. P. Othert	Sacramento	Fifth best	\$5 00
J. A. Robinson	Newcastle	Best display and variety of peaches	\$25 00
P. W. Butler	Penryn	Second best	\$20 00
C. T. Adams	Newcastle	Third best	\$15 00
John Reith, Jr.	Penryn	Fourth best	\$10 00
Clark & Williamson	Penryn	Fifth best	\$5 00
Mrs. J. Shields	Routiers	Best display and variety of plums	\$25 00
Clark & Williamson	Penryn	Second best	\$20 00
Mrs. M. E. Fox	Newcastle	Third best	\$15 00
W. D. Carpenter	Diamond Springs	Fourth best	\$10 00
Mrs. R. S. Lockett	Perkins	Fifth best	\$5 00
H. E. Parker	Penryn	Best display and variety of figs	\$5 00
Mrs. M. E. Fox	Newcastle	Second best	\$2 50
Mrs. M. E. Fox	Newcastle	Best display of tropical fruits	\$20 00
Clark & Williamson	Penryn	Second best	\$10 00
Mrs. M. E. Fox	Newcastle	Best display of oranges	\$10 00
S. N. Struahan.	Nevada City	Best display of fruit by a producer	\$40 00
Clark & Williamson	Penryn	Second best	\$20 00
CLASS II—HONEY, PICKLES, PRESERVES, ETC.			
Mrs. Geo. C. McMullen	Sacramento	Best six jars red currant jelly	\$3 00
Mrs. Geo. C. McMullen	Sacramento	Best six jars blackberry jelly	\$3 00
Mrs. Geo. C. McMullen	Sacramento	Best six jars strawberry jelly	\$3 00
Mrs. Geo. C. McMullen	Sacramento	Best six jars blackberry jam.	\$3 00

Mrs. Geo. C. McMullen	Sacramento	Second best display of jams and jellies in glass	-----	\$5 00
Mrs. H. E. Parker	Penryn	Best six jars quince jelly	-----	\$3 00
Mrs. H. E. Parker	Penryn	Best six jars raspberry jelly	-----	\$3 00
Mrs. H. E. Parker	Penryn	Best display of jams and jellies in glass	-----	\$10 00
Maye Kewen	Sacramento	Best display of branded peaches	-----	\$3 00
Mrs. George Maddox	Sacramento	Best ten pounds California honey	-----	\$5 00
Liechenbaum Bros.	Sacramento	Best display of pickles	-----	\$3 00
Mrs. Addie Carter	San Francisco	Best display of canned and preserved jams and jellies by a factory	-----	\$20 00
Mrs. Addie Carter	Sacramento	Best display of fruit in glass	-----	\$15 00
Mrs. Addie Carter	Sacramento	Best six jars black currant jelly	-----	\$3 00
Mrs. Addie Carter	Sacramento	Best six jars raspberry jam	-----	\$3 00
CLASS III—DRIED FRUITS, NUTS, ETC.				
E. Booth	Roseville	Best ten pounds dried figs	-----	\$10 00
Mrs. J. Shields	Routiers	Best ten pounds dried peaches	-----	\$5 00
Mrs. J. Shields	Routiers	Best ten pounds dried plums	-----	\$5 00
Mrs. J. Shields	Routiers	Best ten pounds dried prunes	-----	\$10 00
S. N. Stranahan	Nevada City	Best ten pounds dried pears	-----	\$5 00
S. N. Stranahan	Nevada City	Best ten pounds dried cherries	-----	\$5 00
S. N. Stranahan	Nevada City	Best ten pounds dried blackberries	-----	\$5 00
S. N. Stranahan	Nevada City	Best ten pounds dried raspberries	-----	\$5 00
S. N. Stranahan	Nevada City	Best ten pounds dried strawberries	-----	\$5 00
Dr. Chapman	Nevada City	Best ten pounds dried apples	-----	\$5 00
Mrs. J. Shields	Nevada City	Best ten pounds dried apricots	-----	\$5 00
Fresno County	Routiers	Best display of dried fruits	-----	\$20 00
D. H. Clippinger	Sacramento	Second best display of dried fruits	-----	\$10 00
W. H. Williamson	Routiers	Best display of soft shelled almonds	-----	\$10 00
E. F. Aiken	Sacramento	Best display of peanuts	-----	\$5 00
Bean Spray Pump Co.	Los Gatos	Best wash for destroying scale insects on fruit trees, with directions for use	-----	Silver medal.
Bean Spray Pump Co.	Los Gatos	Best wash for destroying codlin moth and its larva on fruit trees, with full directions for use	-----	Silver medal.
CLASS IV—GRAPES AND RAISINS.				
E. L. Hawk	Rocklin	Best six varieties of table grapes	-----	\$15 00
J. H. Nile	Grass Valley	Second best six varieties of table grapes	-----	\$7 50
Thos. N. Payne	Grass Valley	Best six varieties of wine grapes	-----	\$15 00
J. H. Nile	Grass Valley	Second best six varieties of wine grapes	-----	\$7 50
Mrs. R. S. Lockett	Perkins	Second best three varieties of wine grapes	-----	\$5 00
Wm. Foster	Lincoln	Best display of California raisins	-----	\$20 00
E. Booth	Roseville	Second best display of California raisins	-----	\$10 00
E. L. Hawk	Rocklin	Best three varieties of wine grapes	-----	\$10 00
Mrs. M. E. Fox	Newcastle	Best display of seedless raisins	-----	\$10 00
J. E. Whitcomb	Colfax	Best three varieties of table grapes	-----	\$10 00
C. T. Adams	Newcastle	Second best three varieties of table grapes	-----	\$5 00
Geo. H. Kerr	Elk Grove	Best one variety of wine grapes	-----	\$5 00

SIXTH DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.	Award.
J. B. Whitcomb	Colfax	Second best one variety of wine grapes	\$2 00
Geo. H. Kerr	Elk Grove	Best variety of table grapes	\$5 00
J. B. Whitcomb	Colfax	Best general display of grapes by a producer	\$25 00
E. L. Hawk	Rocklin	Second best general display of grapes by a producer	\$15 00
CLASS V—BRANDIES AND WINES.			
H. W. Crabb	Oakville, Napa Co.	Best general display of California wines and brandies (24 varieties)	\$100 00
H. W. Crabb	Oakville, Napa Co.	Best brandy over one year old	\$20 00
H. W. Crabb	Oakville, Napa Co.	Best brandy one year old	\$10 00
H. W. Crabb	Oakville, Napa Co.	Best sweet wine	\$20 00
H. W. Crabb	Oakville, Napa Co.	Best California port	\$20 00
J. Gundlach & Co.	San Francisco	Best white wine	\$20 00
F. C. Hellwig	Nevada City	Best claret wine over one year old	\$20 00
M. M. Estee	Napa	Best claret wine one year old	\$20 00
M. S. Nevis	Sacramento	Best sherry wine	\$20 00

Hon. H. M. LA RUE, *Superintendent of Pavilion*:

SACRAMENTO, September 24, 1888.

DEAR SIR: Your Committee on Native Wines and Brandies take pleasure in submitting the above awards as their selection, after due examination and testing. We have gauged our judgment, and by mutual consent agreed upon those as being what the world's market require, believing it to be the best rule to follow, inasmuch as our productions must compete with foreign goods. We note progress generally, but more particularly in red wines, or the so called clarets; several of the samples exhibited astonished the committee in point of excellence, and we believe them to be equal, if not superior, to most of the imported high priced foreign wines. White wines, dry or fully fermented and matured, for which the demand is generally good, are as yet, judging from the samples exhibited (the staples, such as riesling, hock, etc., excepted), deficient, and need better care and attention in their manufacture before they can receive recognition in open market. Sweet or *liqueur* wines remain about the same, although some good samples of sherry have been shown. The addition of low grade brandy as a fortifier should not be resorted to as a preserver. The superiority of brandies depends chiefly from the material used in their manufacture, although some excellent samples are here shown, that need but age to be recognized and appreciated by connoisseurs, when a ready demand will be found for them in the market. In conclusion, we would say that we were entirely ignorant of the manufacturer's name of each or any sample presented for our examination, as the bottles were all covered and respectively numbered. We would, however, respectfully suggest that a second premium be offered on wines and brandies, as it often happens that several well matured samples of the same quality come in competition, and it is difficult for the committee to decide to which number the premium should be awarded.

Yours truly,

JACOB KNAUTH, for the Committee.

SEVENTH DEPARTMENT.

FINE ARTS.

EXHIBITOR.	Address.	Articles Exhibited.	Award.
CLASS I—OIL PAINTINGS, WATER COLORS, ETC.			
Edwin Deakin	San Francisco.	Thirty-three oil paintings.	\$45 00
John A. Stanton	San Francisco.	Eight oil paintings.	\$30 00
A. Michelsen	San Francisco.	One pastel and two crayon portraits.	\$10 00
Amanda Austin	Sacramento.	Four oil paintings and crayon.	\$30 00
Mrs. L. Iredan	San Francisco.	Two water colors.	Silver medal and \$15 00
H. Raschen	San Francisco.	Four oil paintings and five charcoal sketches.	\$20 00
Miss Alice H. Vincent	Oakland.	Three oil paintings.	\$15 00
Mary C. Richardson	San Francisco.	One oil painting.	\$25 00
C. T. Wilson	San Francisco.	Two oil paintings.	\$15 00
Norton Bush	San Francisco.	Nine oil paintings.	\$25 00
C. Von Perlhardt	San Francisco.	Two oil paintings.	\$15 00
F. L. Heath	Santa Cruz.	Eight oil paintings.	\$30 00
J. Kastell	Oakland.	Four oil paintings.	\$10 00
Oscar Kunath	San Francisco.	Two oil paintings.	Silver medal and \$30 00
A. Joulfin	San Francisco.	Five oil paintings.	\$40 00
Emil Carlson	San Francisco.	Two oil paintings.	\$10 00
H. W. Arthur Nahl	San Francisco.	One oil painting and five crayons.	Silver medal and \$20 00
Mrs. E. Dehman	Placerville.	Nine oil paintings.	\$5 00
William Keith	San Francisco.	Fourteen oil paintings.	Silver medal and \$45 00
W. F. Jackson	Sacramento.	One oil painting.	\$15 00
A. C. Rodriguez	San Francisco.	Twelve oil paintings.	\$30 00
Fred. Yates	San Francisco.	Seven oil paintings.	\$25 00
J. Broichaud	San Francisco.	Two oil paintings.	\$5 00
S. M. Brookes	San Francisco.	Ten oil paintings.	\$30 00
E. Nariot	San Francisco.	Seven oil paintings.	Gold medal and \$45 00
R. D. Yelland	San Francisco.	Four oil paintings.	Silver medal and \$35 00
L. Roether	San Francisco.	Two oil paintings and five pastels.	\$10 00
Eva Withrow	San Francisco.	Five oil paintings, ten pastels, and charcoals.	\$50 00
Mrs. A. E. Rogers	San Francisco.	One oil painting.	\$5 00
Chas. Prosch	San Francisco.	Seven oil paintings and one water color.	\$10 00
Chris. Jorgensen	San Francisco.	Seven water colors.	\$15 00
G. Buchwig	San Francisco.	Three crayons and one pastel.	\$5 00
Mrs. S. Farnam	East Oakland.	One crayon.	\$5 00

SEVENTH DEPARTMENT—Continued.

EXHIBITOR.	Address.	Articles Exhibited.	Award.
Oscar Denkin.....	San Francisco.	Six crayons.....	\$10 00
Adaline Morse.....	San Francisco.	Five crayons.....	\$5 00
W. J. Mier.....	Sacramento.	Four crayon portraits.....	\$5 00
Kate P. Herriek.....	Sacramento.	Eleven oil paintings.....	\$10 00
Mrs. M. H. Payne.....	San Francisco.	Five oil paintings.....	\$5 00
W. J. Straight.....	Grass Valley.	One oil painting.....	\$5 00
Mrs. M. C. Boyd.....	San Francisco.	Seven oil paintings.....	\$5 00
R. Helms.....	Sacramento.	Exhibition of portraits in oil and pastel.	Silver medal and \$5 00
Sacramento Art School.....	Sacramento.	Exhibition of oil paintings and crayons.	\$50 00
AMATEURS' GALLERY.			
Mrs. M. E. Tryon.....	Sacramento.	Fourteen oil paintings.....	Silver medal and \$10 00
Mrs. W. G. Richardson.....	San Francisco.	Five oil paintings.....	\$9 00
Paul Menogona.....	San Francisco.	Two oil paintings and one crayon.....	\$5 00
Miss Belle Hay.....	San Francisco.	Two oil paintings.....	\$8 00
Addie L. Hughes.....	Sacramento.	One oil painting.....	\$3 00
Mary Crouch.....	Sacramento.	One crayon drawing.....	\$3 00
Louise Harris.....	Oakland.	One oil painting.....	\$5 00
Mrs. S. S. Boynton.....	Oroville.	Seven oil paintings.....	\$8 00
Miss S. J. Hopper.....	Sacramento.	Seven oil paintings and one water color.	\$3 00
Miss Maggie O'Toole.....	Freeport.	Five crayon drawings.....	\$3 00
Miss Josephine Hayes.....	Sacramento.	Three oil paintings.....	\$3 00
Miss Annie C. Pearl.....	Sacramento.	Three oil paintings.....	\$3 00
Miss Mary Slayback.....	San Francisco.	Three crayon drawings.....	\$3 00
Clarkson Dye.....	San Francisco.	Two oil and water color paintings.....	\$5 00
J. E. Lafontaine.....	San Francisco.	Two oil and one crayon drawing.....	\$8 00
W. B. Sawyer.....	Sacramento.	Four oil paintings.....	\$5 00
Mrs. M. E. Phipps.....	Yuba City.	Two oil paintings, one crayon, and one india ink.....	\$5 00
Mary Horstmeier.....	Sacramento.	Three oil paintings.....	\$3 00
Louise J. Conrad.....	Sacramento.	Four crayons and two pen and ink drawings.....	\$3 00
Mrs. H. C. Briggs.....	Oakland.	Special pre- mium by Director Cox.	\$5 00
Mrs. Frank Powell.....	Folsom.	Two oil paintings.....	\$5 00
CLASS II.—PHOTOGRAPHS.			
A. O. Gregory.....	Sacramento.	Display of photography.....	Silver medal and \$25 00
S. Roysen.....	Sacramento.	Display of photography.....	\$10 00
I. Taber.....	San Francisco.	Display of photography.....	\$15 00
George D. Stewart.....	Sacramento.	Display of landscape photography.....	\$5 00

CLASS III—ETCHINGS, INDIA INK, ETC.				
Carl Eizenschmel	San Francisco	Three specimens of pen drawing	Silver medal and \$50 00	
Chris. Jorgensen	San Francisco	Six specimens of pen and ink drawing	\$15 00	
John A. Stanton	San Francisco	Twelve specimens of pen and ink drawing	\$25 00	
Oscar Deakin	San Francisco	Two specimens of pen drawing	\$10 00	
CLASS IV—STATUARY, FRESCO, MO- SAIC, ETC.				
F. Happersberger	San Francisco	Seven specimens of statuary	Silver medal and \$50 00	
Frederick Flohr	San Francisco	Fourteen specimens of statuary	\$15 00	
W. A. Newell	San Francisco	Three specimens of statuary	\$25 00	
Charles Holland	Sacramento	Four specimens of statuary (in soap)	\$10 00	
CLASS V—PENMANSHIP.				
Sacramento Business College	Sacramento	Display of penmanship	Silver medal.	
CLASS VI—JUVENILE.				
Fred. Blanchard	Sacramento	Seven crayon drawings	\$5 00	
CLASS VII—CALIFORNIA DRAWINGS AND DESIGNS.				
Jacob Lenzén & Son	San José	Original mechanical drawing	Silver medal.	
Sacramento Grammar School	Sacramento	Display of drawings in pen, pencil, and water colors	Sil. medal and diploma.	

EIGHTH DEPARTMENT.

COUNTY EXHIBITS.

Exhibitor.	Address.	Articles Exhibited.	Award.
B. M. Berry.....	Newcastle.....	Placer County products.....	\$500 00
Samuel Houchins.....	Colusa.....	Colusa County products.....	\$450 00
Pomona Grange.....	Lodi.....	San Joaquin County products.....	\$450 00
J. R. Nickerson.....	Nevada City.....	Nevada County products.....	\$450 00
Chauncey Langdon.....	Eureka.....	Humboldt County products.....	\$300 00
D. G. McLean.....	Merced.....	Merced County products.....	\$250 00
B. M. Maxey.....	Fresno.....	Fresno County products.....	\$100 00

NINTH DEPARTMENT.

MISCELLANEOUS EXHIBITS.

Exhibitor.	Address.	Articles Exhibited.	Award.
Stanton, Thomson & Co.....	Sacramento.....	Road scraper.....	\$3 00
Fred. Rohrer.....	Sanita Rosa.....	Diamond fruit pitter.....	\$2 00
J. H. H. Pound.....	San Francisco.....	The Australian patent fence wire stretcher and permanent fastener.....	\$2 00
Pacific Saw Manufacturing Co.....	San Francisco.....	Duncan's timber jack.....	\$2 00
L. Bean.....	Los Gatos.....	Spray pump.....	Diploma.
A. Doble.....	San Francisco.....	Refined cast steel.....	\$3 00
A. Doble.....	San Francisco.....	Black's diamond silver tool steel.....	\$3 00
A. Doble.....	San Francisco.....	Wright's picks and pick eyes.....	Silver medal.
Pacific Saw Manufacturing Co.....	San Francisco.....	Boss wood saw.....	\$5 00
Pacific Saw Manufacturing Co.....	San Francisco.....	C. B. Paul's files.....	Silver medal.
Pacific Saw Manufacturing Co.....	San Francisco.....	Pruning saw, adjustable blade.....	Silver medal.
G. G. Wickson.....	San Francisco.....	Creamery engine.....	\$5 00

Judson Manufacturing Co.	San Francisco	Display of tacks	-----\$2 00
Joseph Budd	San Francisco	Golden Gate water-closet	-----Diploma.
Elijah Hickman	Red Bluff	Hickman's improved roller bolster for general use	-----\$2 00
John Herrel	Plymouth	Dried fruit renovator	-----\$2 00
W. H. Murray	San Francisco	Harvey's hot water and steam radiators	-----Diploma.
S. C. H. and Agricultural Works	Stockton	Improved shoe for combined harvester or thrashing machine	-----Diploma.
S. C. H. Works & Co.	San José	Mansfield's capillaris	-----Diploma.
Charles Gibbons Davis	San Francisco	The Welsbach system of incandescent gas lighters	-----Diploma.
J. T. Dufau	San Francisco	Packing case and box fastener for demijohn	-----Diploma.
Huller Drug Co.	San Francisco	Manufactured tablets	-----\$3 00
A. C. Shaw	Sacramento	One patent piano player	-----Diploma.
James Fordeier	San Francisco	Skylight for roofs of buildings	-----Silver medal.
Catten, Bell & Co.	San Francisco	Little's chemical fluid	-----Diploma.
The W. H. Bone Co.	San Francisco	C. C. Liniment	-----Diploma.
R. E. Gogings	Sacramento	Veterinary medical chest	-----\$3 00
Madam Lee	San Francisco	Cosmetics and manicure	-----Diploma.
Mrs. O. W. McGowan	Sacramento	One lyre of shavings flowers made of Oregon cedar	-----Premium recommen'd.
Fred. Jantzen	San Francisco	Jantzen's portable lamp	-----\$3 00
James Lintforth	San Francisco	Bronze statuary and monuments	-----Diploma.
The Guittard Mfg Co.	San Francisco	Perfumery (California manufacture)	-----Silver medal.
American Bridge and Building Co.	San Francisco	Display of roofing slate	-----Diploma.
Dickert & Meyers	Cove Creek, Utah	Roll sulphur (sublimite and fine ground)	-----Diploma.
Asa F. Heyden	San Francisco	Gelatine relief process and photo engraving	-----Diploma.
J. Everding & Co.	San Francisco	California laundry wheaten starch	-----Diploma.
Bandmann, Neilsen & Co.	San Francisco	Giant powder Nos. 1 and 2	-----Diploma.
Bandmann, Neilsen & Co.	San Francisco	Gelatine dynamite and dynamite gelatine.	-----Diploma.
Mrs. E. A. Wilson	Temescal	Object lessons	-----Diploma.
Mrs. C. A. Blodgett	Temescal	Language lessons	-----Diploma.
Towle Bros. & Co.	Alta	Wood pulp	-----Diploma.
Margaret Leach and Edith Stone	Oakland	Object lessons	-----Diploma.
Lawrence Valera	Temescal	Object lessons	-----Diploma.
Robert Bayley	San Francisco	Display of paper boxes	-----Diploma.
E. C. Mead & Co.	San Francisco	Silver cream powder	-----Silver Medal.
E. C. Mead & Co.	San Francisco	Display of White's pie turner	-----Diploma and \$2
E. C. Mead & Co.	San Francisco	Display of coal oil lamps	-----\$3 00
A. S. Graff	Sacramento	Display of working model of locomotive	-----Diploma.
George Topping	Sacramento	Display of ideal embroidery (machine made)	-----\$3 00
Mrs. Belle Quarles	Chili Bar	Exhibit of roofing slate	-----Diploma.
George J. Mothersole	San Francisco	Display of Victor extracts	-----Diploma.
Washington Manufacturing Co.	San Francisco	Hamasus creme and poudre	-----Diploma.
Shoardt Bros.	San Francisco	Display of dress stays and dress extenders.	-----\$5 00
Miss Carrie Murray	San Francisco	Display of indurated fiber ware	-----Diploma.
A. S. Hopkins & Bro.	Sacramento	Tule life preservers	-----Diploma.
The Leduc Improvement Co.	San Francisco	Kelly's wood stain, all colors	-----Premium recommen'd.
Alf. R. Kelly	San Francisco	Best display of pianos and musical goods	-----\$3 00
John F. Cooper	Sacramento		

NINTH DEPARTMENT—Continued.

Exhibitor.	Address.	Articles Exhibited.	Award.
William C. Hevener.....	Sacramento.....	Best display of bicycles and tricycles.....	Silver medal.
George R. Hunsbrow.....	Sacramento.....	Best design of exhibit.....	\$50 00
Mrs. Geo. C. McMullen.....	Sacramento.....	Jellies.....	\$5 00
Isaac Lea.....	Florin.....	Mission olives.....	\$3 00
Isaac Lea.....	Florin.....	Licorice root.....	\$3 00
E. F. Aiken.....	Sacramento.....	Display of squashes.....	\$5 00
P. M. Artz.....	Perkins.....	String beans.....	\$2 00
J. P. M. Perham.....	San Francisco.....	Vermont maple syrup.....	----- Diploma.
W. H. Murray.....	San Francisco.....	Display of maps, models, representing our State in commerce and trade, her manufactures, embracing cotton, silk, ramie, jute, and kindred resources.....	----- \$30 00
Harry Foster.....	Sacramento.....	Evergreen millet.....	----- \$2 00
C. H. Street & Co.....	San Francisco.....	Display of California products.....	----- Diploma.
B. N. Bugbey.....	Sutter.....	Individual farm exhibit.....	Silver medal.
B. N. Bugbey.....	Sutter.....	One bale and six bundles of broom corn.....	----- \$5 00
Tom. Lovdahl.....	Sacramento.....	Two bales of hops.....	----- \$5 00
Mrs. H. E. Parker.....	Penryn.....	Jams and jellies.....	----- \$5 00
G. L. Hunt.....	Elk Grove.....	Sack and sheaf of black bearded wheat.....	----- \$2 00
Miss Carrie Murray.....	San Francisco.....	Display of olive oil from Quito farm.....	Silver medal.
Maye Kewen.....	Sacramento.....	Jellies and jams.....	----- \$3 00
J. H. Burnell.....	San Francisco.....	Albion porter.....	Silver medal.
F. Whittaker & Sons.....	San Francisco.....	Exhibit of lard.....	----- \$5 00
M. Bates.....	Sacramento.....	Two cotton plants.....	----- \$2 00
Mrs. R. S. Frazee.....	Sacramento.....	Rolls (wheat bread).....	----- \$2 00
Mrs. George Muddox.....	Sacramento.....	Bottled green peas, egg tomatoes, and popcorn in ear.....	----- \$3 00
J. R. Nickerson.....	Grass Valley.....	Cultivated grasses and grains.....	----- \$5 00
D. F. Fryer.....	Oroville.....	Abiotine remedies.....	----- Diploma.
Liebenbaum Bros.....	San Francisco.....	Saratoga (La Favre's) chips.....	----- Diploma.
S. N. Stranahan.....	Nevada.....	Sun dried hops.....	----- \$2 00
Mrs. R. S. Lockett.....	Perkins.....	Display of cotton.....	----- \$2 00
Chas. McCreary & Co.....	Sacramento.....	Superfine shipping flour.....	Silver medal.
Liebenbaum Bros.....	San Francisco.....	Plum pudding and sauce.....	Silver medal.
Mrs. Addie Carter.....	Sacramento.....	Jellies, jams, etc.....	----- \$5 00

DEPARTMENT GOLD MEDALS.

FIRST DEPARTMENT.

To R. J. Merkeley, of Sacramento, for most meritorious exhibit of horses.
To P. Peterson, of Sites, Colusa County, for most meritorious exhibit of live stock other than horses. (Herd of Durham cattle.)

SECOND DEPARTMENT.

To Benicia Agricultural Works, for most meritorious display of agricultural machinery.

THIRD DEPARTMENT.

To Mrs. M. H. Ober, of San Francisco, for the most meritorious display of textile fabrics. (Ladies and children's underwear and fancy goods.)

FOURTH DEPARTMENT.

To Capital Soap Co., for the most meritorious display of mechanical products. (Display of soaps.)

FIFTH DEPARTMENT.

To San Joaquin County, for the most meritorious display of agricultural products. (Cereals.)

SIXTH DEPARTMENT.

To H. W. Crabb, of Oakville, Napa County, for the most meritorious display of brandies and wines.

SEVENTH DEPARTMENT.

To E. Narjot, of San Francisco, for the most meritorious display of fine arts.

NINTH DEPARTMENT.

To Philadelphia Brewing Co., San Francisco, for the most meritorious display in the Miscellaneous Department. (Lager beer.)

FOR THE MOST ATTRACTIVE DISPLAY.

To Huntington, Hopkins & Co. (George R. Hansbrow, designer), the most attractive display in the Pavilion.

SAN FRANCISCO JOURNAL OF COMMERCE SPECIAL DISPLAY OF EXHIBITS.

Although in the fair there were many exhibits worthy of mention, there were none that exceeded the really magnificent and extensive display of the "Journal of Commerce" of San Francisco. The various counters, shelving, pyramids, and tables occupied an area on the main floor near the band stand aggregating two thousand eight hundred and sixteen square feet. To give a complete description of this attractive as well as instructive exhibit would take up too much space at this time, so but a passing reference will be made.

On a wall space, forty feet long, was to be seen one of the most striking signs ever exhibited at any fair, and read "San Francisco Journal of Commerce display—Special exhibits." The monster letters represented every department of commerce—metals, grains, products, etc.—each letter being composed of a cereal or metal, the whole forming one of the most interesting things to be seen, and the crowds who constantly assembled complimented the ingenuity and enterprise of the journal.

Turning to the right, at the end of the wall-table, was found a display of varnishes in a magnificent case, as well as the materials from which they were manufactured. Above this there was an artistic oil painting, some ten by fifteen feet in size, forming an attractive feature. Heuter Bros., proprietors of the pioneer varnish works, were entitled to the credit of home-made varnishes. Then, neatly arranged, came grain exhibits, topographical maps, mineral exhibits, models in elegant cases, including the powerful Hercules dredger employed on the Panama Canal, and manufactured by the Golden Gate and Miners' Iron Works of San Francisco; and numerous other instructive and interesting articles. Near the stairway a blaze of light fell on a display of crackers, staple and fancy. Artistically arranged was the display of the Selby Smelting and Lead Company, consisting of standard cartridges, bar lead, lead pipe in cabinet, tin pipe, lead pipe, and anti-friction metal, which attracted much attention. A display of bluestone and copper was made by this company.

Arranged in the form of a triple pyramid was a fine display of Albion ale and porter, made by J. H. Burnell, of San Francisco.

A display by James Linforth, of San Francisco, consisting of roll, pulverized, and sublimed sulphur, being the product of the Dickert & Meyers Sulphur Company's mine at Cove Creek, Utah. Adjoining, Messrs. C. H. Street & Co., successors to the Immigration Association of California, made a display of California products, consisting of cotton, silk, mohair, alfalfa, California woods, etc.

A table forty feet long had a fine exhibit from the California Cotton Mills, of Oakland, which attracted a large share of attention, and which will certainly result in much benefit to the industry. The display consisted of towels and tablecloths, dressed flax, yards of cotton duck and toweling, linen sack twine, and yards of kersey.

Maps, charts, artistic designs, and a series of large photographs of California scenes and views, the latter from Taber, of San Francisco, showed

unequaled proficiency in this art. A view of San Francisco Bay, eight feet long, together with large crayon portraits of the late Charles Crocker, C. P. Huntington, Senator Stanford, and Governor Waterman, combined to form a display of great interest and excellence.

J. Gundlach, of San Francisco, filled in magnificent designs with a very creditable display of Sonoma wines and brandies. The arrangement of the exhibit was excellent, being in the center of the main hall. The Riesling of Gundlach & Co., of San Francisco, had a most palatable taste, retaining the natural flavor of the grape, showing that careful vintage had accomplished the result.

A little cottage manufactured of slate by the California Slate Company, of San Francisco, surrounded by samples, came in for its share of attention.

Exhibits of wood pulp for paper, from Towle Bros., of Alta, Sierra Nevada Mountains. An elegant display of pure Vermont maple syrup was made by J. M. P. Perham.

Francis Whittaker & Sons, Thos. Loughran & Co., agents, for lard manufactured free from cotton seed oil, attracted much attention. Little's sheep dip, in tanks covered with attractive labels, caught the eye of the sturdy stockman. Messrs. Catton, Bell & Co., of San Francisco, made this display.

The California Chemical Works, John Reynolds, proprietor, did its establishment ample justice by a complete exhibit of oil of vitriol, muriatic and nitric acids, nitric of iron, and excelsior soldering solution. Jute in various forms, sent by the management of San Quentin Prison, including bags and bagging, proved very interesting to visitors.

A display of the famous California port wine manufactured by H. Palmer, of San Francisco, came in for a large share of attention. The exhibit of potash and caustic soda from the Greenbank Alkali Works, of England, by T. W. Jackson & Co., of San Francisco, was one of the finest in the fair.

One pyramid was a display of camphor and chloral liniment by the W. H. Bone Company, of San Francisco.

Jos. F. Forderer, of San Francisco, made a fine exhibit, especially prepared for this fair, of his galvanized iron work for the ornamentation of buildings. Iron work is of short life compared to this new process. This was one of the most interesting and attractive exhibits of the fair. Olive oil from the famous Quito Olive Farm, Santa Clara County, showed California excellence in olive oil country.

Entering Machinery Hall from the main building the Pacific Saw Manufacturing Company made a fine display of saws. Their pruning saws with adjustable blades that can be turned on any angle and also can be detached and reversed if necessary—the backs being of steel always keep the blade strained properly; which together with N. W. Spalding's patent chisel bit circular saw, which had been entered for a gold medal, forms a central figure in the display, making it complete.

To the right of the main aisle of the general exhibit arranged in pyramid were a hundred varieties of bottles, flasks, etc., from the San Francisco and Pacific Glass Works. It gave evidence that the facilities of the establishment were complete, and any demand that may arise can be met by Mr. Carlton Newman.

We may follow with mention of a rare lot of samples of Pacific Coast wools, scoured and fleece wools from the firm of Christy & Wise, of San Francisco. The fiber was compared by experts, and the superiority of localities easily ascertained. A single fleece from a young sheep attracted

attention by its fineness and heavy weight, tipping the scales at sixteen pounds.

Near the electric light in Machinery Hall, a large and heavy sheet of pure Michigan copper, bearing the address of Abner Doble, was a conspicuous object. It was surrounded by blacksmith's tools and John Wright's famous Washoe picks, making a very credible display. Many a remembrance of the lively times was recalled to old time miners by the sight of those industrious looking picks as they lent their graceful curve and strong eye for the purpose of making an attractive representation.

The champion metallic wheelbarrow, as manufactured by Sims & Morris, was exhibited by them in Machinery Hall.

A very novel and excellent invention known as the double spiral spring bed, exhibited by the manufacturer, Mr. Harmon, of San Francisco. This bed is destined to have an enormous sale.

The Guittard Manufacturing Company, of San Francisco, exhibited in great abundance their famous teas, coffees, and spices, fancy chocolates, perfumes, Florida water, bay rum, etc., arranged in an attractive manner. This company had also a special brand of Chef baking powder.

G. W. Hagens, of San Francisco, had a display of sheet music.

Mr. Alf. R. Kelly, of San Francisco, had Golden West oil, Neal's carriage paints, also imperishable paint.

Mr. T. D. Doyle, of San Francisco, exhibited a clasp, and an improved beveled horseshoe nail that has much credit.

H. M. Newhall & Co., agents for Mexican Phosphate and Sulphur Company, made a good showing of guano fertilizer. Samples of this were placed in the hands of an expert to report on same.

The Giant Powder Company, of San Francisco, made an exhibit of a case filled with bottles, containing dynamite gelatine, gelatine dynamite blasting and Judson powder, Giant powder cartridges, and various other explosives.

The San Francisco Produce Exchange made a display of Standard California grain. This company shipped to Europe during 1888 over \$600,000 worth, and the demand is rapidly increasing.

The Business College, conducted by Professor G. B. Barnard, of San Francisco, made a fine display of the work of the commercial school. It reflected credit on the scholars.

The exhibit of California starch and granulated soap, by J. Everding, Jr., of San Francisco. Both soap and starch are manufactured from wheat, while the former has properties for beautifying the complexion and softening the skin, which will commend it to the ladies in particular. This new product is certain to become extremely popular, and will have an immense sale.

The Leduc Tule Improvement Company exhibited a tule life preserver; also, a working model of F. A. Huntington's centrifugal roller quartz mill, thorough and complete. They have been thoroughly tested in hundreds of instances, and have never failed to perform their work.

An exhibit of zinco-relief plates was made by McCabe & Co., of San Francisco. The display was a credit to this enterprising firm.

Steam and hot water radiators, made by C. D. Harvey, of San Francisco, were exhibited in a very neat manner.

Celery, beef, and iron made a notable display.

L. H. Thomas, of Visalia, made a fine display of peaches and assorted fruits.

The model of the locomotive, "Governor Stanford," the first built on the Pacific Coast, was a great attraction, and as the old locomotive is still

doing excellent service in the yards at Sacramento, it is proof positive that the workmanship was of a superior quality, and stands the heavy usage without strain or injury.

S. P. Taylor & Co., the pioneer paper manufacturers of the Pacific Coast, exhibited a beautiful pyramid of paper, containing two tons of vari-colored paper and eagle paper bags. It proved to many visitors from the East that California can manufacture as fine paper as any State in the Union.

Tancredi Vallerga, of Temescal, exhibited a map of California. The various sections being represented by the leading product, either in metals or product; it was highly complimented.

Miss Edith Stone and Miss Margaret Leach, members of Mrs. J. O'Meara's class of the Lincoln Grammar School, of Oakland, exhibited object lessons, consisting of a map of the United States. It was handsomely arranged, faithfully representing our products, and was artistic in detail.

Mrs. Clara A. Blodgett, a teacher in the Temescal public school, exhibited language lessons from her pupils, and the display was carefully scrutinized and complimented by hundreds and thousands of visitors.

Mrs. E. A. Wilson, Principal of the Temescal School, contributed object lessons, which were exceedingly meritorious, and showed plainly artistic and skillful work.

James Gamble, of Oakland, exhibited sections of submarine cables, together with a submarine chart of the world, showing all telegraph lines, both by lands and seas.

An architectural drawing of the California Hospital for the Chronic Insane, at San José, an original mechanical drawing by Jacob Lenzen & Son, architects, San José, was awarded a medal.

The exhibit made by the "San Francisco Journal of Commerce" of the manufactures, products, and goods of California, was one of the prominent features of the fair. It was unique in design, and comprehensive in scope, and will undoubtedly be of great benefit as setting forth the resources and capabilities of the State, embracing as it does a great variety of valuable and useful articles. The display was under the charge of W. H. Murray, the Secretary of the company, to whose taste and ingenuity in arrangement of details was largely due the credit of the exhibit, and who originated the idea, and carried it to a successful issue. The forty large shields, which were so conspicuous a feature, were also designed by the same gentleman. The large and plain lettering on these shields, in a concise and well arranged manner, gave the facts desirable to be known regarding the State, its products, population, wealth, manufactures, and commerce.

THE PROFITABLE OLIVE.

Every few days the experience of some olive grower appears in the papers. With all that can be truthfully said about the large profits from oranges, raisins, and other products, the olive will equal, if not exceed, them all, verifying the old adage that "an olive plantation is a gold mine on the surface of the earth." The "Templeton Times," San Luis Obispo County, lately gave the following in point:

"Major Utt has an olive orchard of twenty-five bearing trees, planted in orchard seven years to include 1886; the product of ten of them last year was seven hundred and fifty gallons of olives. He sold the surplus crop at 40 cents per gallon, casks furnished, for \$12 per tree. Fifty gallons of average crop to the tree at twelve years from the planting of the orchard would be a low estimate, and this amount would make six and a quarter gallons of oil. Ellwood Cooper gets \$10 a gallon for his oil. Increased production will lower the wholesale price to \$4 per gallon, or at the lowest \$25 per tree, equal to \$900 per acre. Allow one half for expenses and interest on investment, and you have the net sum of \$450 per acre as net profits. Mr. Loop has been offered 80 cents a gallon for all the pickles."

All authorities from one thousand years back to this day say the olive should be planted on dry soil, and needs but little water. Good cultivation is essential, as it is to success in the growth of any profitable crop.

An authority on olive growing says: "The trees grow readily from cuttings, and begin to bear in the fourth year of their permanent planting from one-year old rooted cuttings. A paying crop will be gathered on favorable soil the fifth year."

ALFALFA AS A HORSE FEED.

B. F. Johnson writes the "New York Tribune:" "Intelligent and observant horse men tell us the California two-year old thoroughbred is, as an average, quite as well grown and as fully developed as the three-year old of our side of the mountain. This, they say, is probably owing to the mildness of the climate and a green forage all the year round, if needed, that keeps a colt growing right along. These are, no doubt, good reasons, but possibly they do not embrace all of them. Has it ever been sufficiently considered whether the feeding of alfalfa (lucerne), green and dry, may not have something to do with the rapid growth and size attained at an early age? We know there are no better pastures in the world for putting on fat and flesh than those of Kentucky; where blue grass abounds, supported by timothy and clover, red and white; and we know, too, that in spite of all these advantages, Kentucky bred stock is losing in size and weight every year, however it may gain in quality. And the same is, to a certain extent, true of the blue grass, timothy, and clover pastures of the entire blue grass region west of the Alleghanies and north of the Ohio River. In view of these several facts, will it be worth while to try experiments with alfalfa and learn by actual trial whether it may not do for eastern stock what it has done for that of the Pacific Slope—given it the lead in fast and fine horses, with other kinds of stock to be heard from later on?"

In commenting on the above, the "Rural Press" says: "It will be a good thing to try it, but one need not expect to reproduce at the East all the California conditions which contribute to the rapid and magnificent development of the animal merely by growing alfalfa. The fact of the matter is that even alfalfa owes its excellence here to local climatic conditions which cannot be transplanted. Alfalfa was grown in Central New York when we were there fifteen years ago, but it was mighty poor alfalfa compared with what grows here."

THE RAISIN INDUSTRY.

[From the "Chino Champion," San Bernardino County.]

Fresno seems to stand ahead in the quantity of raisins cured and shipped this year, but neither the soil nor climate there is better than in this valley for growing the raisin grape and making raisins. About a month ago the "San Bernardino Index" interviewed a former resident of the county, then on a visit down here, who has spent some years in Fresno, on the raisin business. While giving Fresno credit for great success honestly earned, he said:

"Yes, but it is all a mistake to credit Fresno with better facilities for growing and curing fine raisins than are possessed here, for those of this county are in nearly every respect superior. The raisin here is more delicate in flavor and richer in sugar, and Fresno vineyards do not begin to yield like those of this county."

The "Index" says: "W. T. Henderson was present at the interview, and said that his young vineyard at Highlands was doing well; that, although it was not by any means in full bearing, he had sold over seven tons of cured raisins from a little less than four acres, from which statement we infer that he received considerably over \$200 an acre for the crop."

Wherever the raisin grape has been planted and properly cultivated in this county, the results have been large. Right around Chino there are many thousand acres of choice land for the profitable raisin grape.

SPEED PROGRAMME.

THURSDAY, SEPTEMBER 6, 1888.

RACE No 1—TROTTING.

The Occident Stake. For foals of 1885. Entries closed January 1, 1886. One hundred dollars entrance; of which ten dollars must accompany nomination; fifteen dollars to be paid January 1, 1887; twenty-five dollars to be paid January 1, 1888, and fifty dollars thirty days before the race. The Occident Gold Cup of the value of four hundred dollars to be added by the society. First colt, cup and six tenths; second colt, three tenths; and third colt, one tenth of stake. Mile heats, three in five, to harness. Fourth payment was made on the following entries:

Name and Pedigree of Horse.	By Whom Entered.	Address.
Monteith, b. c., by Electioneer; dam, Mamie C, by imported Hercules.....	Palo Alto Stock Farm.....	Menlo Park.
Sol Wilkes, b. c., by Guy Wilkes; dam, Flora Langford, by Langford.....	Wm. Corbitt.....	San Francisco.
Redwood, b. c., by Anteeo; dam, Lou Milton, by Milton Medium.....	A. McFadyen.....	Santa Rosa.

SUMMARY.

Redwood (Donathan).....	2	1	1	1
Sol Wilkes (Brandow).....	1	2	2	2

Time—2:47; 2:39½; 2:36½; 2:40½.

RACE No. 2—TROTTING.

2:23 Class. Purse, one thousand two hundred dollars. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Thapsin, blk. g., by Berlin; dam, Lady Hubbard.....	W. F. Smith.....	Sacramento.
Gertrude Russell, b. f., by Electioneer; dam, Winnie, by Planet.....	Palo Alto Stock Farm.....	Menlo Park.
Alfred S, b. g., by Elmo; dam, Nora Marshall, by Union.....	H. W. Seale.....	San Francisco.
Mamie Comet, ch. m., by Nutwood; dam, by Sportsman.....	San Mateo Stock Farm.....	San Mateo.
Alcazar, b. c., by Sultan; dam, Minnehaha.....	L. J. Rose.....	Los Angeles.
Valentine, br. g., by Farrell Clay; dam, Queen.....	J. H. Kelly.....	Los Angeles.
Gus Wilkes, b. g., by Mambrino Wilkes; dam, by Bonner.....	J. A. Dustin.....	Oakland.

SUMMARY.

Valentine (Kelly).....	4	4	1	1	1
Thapsin (W. F. Smith).....	2	2	4	4	3
Gus Wilkes (Dustin).....	3	3	3	3	2
Alfred S (McManus).....	1	1	2	2	dis.

Time—2:22; 2:21½; 2:24½; 2:24; 2:28½.

RACE NO. 3—PACING.

2:30 Class. Purse, six hundred dollars. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Ontario, blk. g., by Crown Point; dam, unknown.	A. Tietjens	Sacramento.
Ned Winslow, blk. g., by Tom Benton; dam, by David Hill, Jr.	J. L. McCord	Sacramento.
Yolo Maid, b. m., by Alex Button; dam, by Dietz's St. Clair	C. R. Hoppin	Yolo.
Goldleaf, ch. f., by Sidney; dam, Fernleaf	Pleasanton Stk Farm	Pleasanton.
Elwood, b. m., by A. W. Richmond; dam, Creighton's First, by Creighton	Hemett Stable	Los Angeles.
Little Doc, b. g., by Jack Hawkins; dam, unknown	F. Sequin	Ione.
San Diego, b. g., by Victor; dam, thoroughbred.	H. C. Airhart	San Diego.
Cricket, b. m.; pedigree unknown	J. A. Dustin	Oakland.

SUMMARY.

Yolo Maid (Goldsmith)	1	1	1
San Diego (Walsh)	2	2	3
Goldleaf (McDowell)	4	6	2
Ned Winslow (McCord)	3	4	4
Elwood (Durfee)	5	3	5
Cricket (Dustin)	6	5	6
Little Doc (Ober)	7	7	7

Time—2:19; 2:23½; 2:21¼.

FRIDAY, SEPTEMBER 7, 1888.

RACE NO. 4—RUNNING.

The Introduction Stake. For two-year olds. Twenty-five dollars entrance; ten dollars forfeit; two hundred and fifty dollars added, of which fifty dollars to second; third to save stake. Winner of any two-year old race this year, to carry three pounds; of two or more, five pounds extra. Three quarters of a mile.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Almont, b. c., by Three Cheers; dam, Question, by Joe Hooker	W. M. Murry	Sacramento.
G W, b. g., by Kyrle Daly; dam, by Thad Stevens.	G. W. Trahern	Stockton.
The Czar, ch. c., by Norfolk; dam, Marian, by Malcolm	Theo. Winters	Sacramento.
Barham, b. c., by Norfolk; dam, sister to Lottery	Theo. Winters	Sacramento.
Don José, ch. c., by Joe Hooker; dam, Countess Zeika, by Norfolk	Theo. Winters	Sacramento.
Bessie Shannon, b. f., by Shannon; dam, Betty Bishop	J. Reavey & Co.	Sacramento.
Little Phil, ch. c., by Leinster; dam, Lillie H.	T. Bally	Sacramento.
Duke Spencer, b. c., by Duke of Norfolk; dam, Lou Spencer	F. Depoister	Sacramento.
Libertiflibbet, b. f., by Bullion; dam, Fibbertigibbet	L. U. Shippee	Stockton.
Glencola, b. f., by Glengarry; dam, Marcola	L. U. Shippee	Stockton.
Lucknow, br. g., by Longfield; dam, Sweetbrier.	Rancho Del Paso	Sacramento.
Reward, b. g., by Jim Brown; dam, Trophy	Rancho Del Paso	Sacramento.
Rosebug, ch. g., by Jim Brown; dam, Rosemary.	Rancho Del Paso	Sacramento.
Joe Hoge, ch. c., by Joe Hooker; dam, Viola R.	H. I. Thornton	San Francisco.
Young Prince, b. c., by imported Young Prince; dam, Mercedes	C. Farnum	San Francisco.
Jack Pot, br. g., by Joe Hooker; dam, Lugena.	Thos. G. Jones	San Francisco.
Futurity, br. or blk. f., by John A; dam, Ella Doane	W. L. Appleby	Santa Clara.
Lady Helen, b. f., by Norfolk; dam, Jessie R.	T. H. Williams	Stockton.
Naicho B, ch. g., by Wanderer; dam, Flower Girl.	Los Angeles Stable	Los Angeles.
Four Aces, ch. c., by Hock Hocking; dam, Maid of the Mist	John D. Dunn	Los Angeles.

SUMMARY.

Don José (Holloway, 115 pounds)	1
Lady Helen (Hitchcock, 110 pounds).....	2
Duke Spencer (O'Neil, 113 pounds).....	3
Libbertifibbet, Reward, and Futurity ran unplaced.	
<i>Time—1:17.</i>	

RACE No. 5—RUNNING.

California Breeders' Stake. For foals of 1885. To be run at the State Fair of 1888. Entrance, fifty dollars; twenty-five dollars forfeit, or only ten dollars if declared January 1, 1888; three hundred dollars added, of which one hundred dollars to second, and fifty dollars to third. One mile and a quarter.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Gorgo (imp.), br. f., by Isonomy; dam, imported Flirt, by The Hermit	George Hearst	San Francisco.
Peel, b. c., by Monday; dam, Precious, by Lever.	Palo Alto Stock Farm	Menlo Park.
Snowdrop, ch. f., by Joe Hooker; dam, Laura Winston	James Garland	Sacramento.
Surinam, b. c., by Joe Hooker; dam, Ada C.	George Hearst	San Francisco.
Peregrine, ch. c., by Joe Hooker, or Jumbo; dam, Irene Harding	W. M. Murry	Sacramento.
Ed McGinnis, b. c., by Grinstead; dam, Jennie G.	H. L. Samuels	Los Angeles.
Carmen, ch. f., by Wildidle; dam, Nettie Brown.	Laurel Wood Stable	Santa Clara.
Kyle D, b. c., by Kyle Daly; dam, Maggie S.	Laurel Wood Stable	Santa Clara.
Partisan, b. c., by imp. Partisan; dam, Mamie, by Specter	C. Dorsey	Oakdale.
Theo. Winters, ch. c., by Joe Hooker; dam, Mattie C, by Specter	Matt. Storn	San Francisco.
King Idle, br. c., by Wildidle; dam, Augusta E.	L. H. Todhunter	Sacramento.

SUMMARY.

Peel (Courtney, 118 pounds).....	1
Snowdrop (Kelly, 115 pounds).....	2
Carmen (Appleby, 115 pounds).....	3

Time—2:12½.

RACE No. 6—RUNNING.

Capital City Stake. A sweepstake for three-year olds and over, in which only non-winners in any event this year will be eligible to start. Winners of any race, entered herein, may be withdrawn without incurring a forfeit. Entrance, fifty dollars, h. f., with four hundred dollars added; of which one hundred dollars to second; third to save stake. One mile and one eighth.

Name and Pedigree of Horse.	By Whom Entered.	Address.
J M R, ch. h. (3), by imported Kelpie; dam, by Joe Daniels	Jas. Woodburn	Sacramento.
Etta W, ch. m. (4), by Joe Hooker; dam, by Foster	Andy Wakeman	Elk Grove.
Haidee, br. m. (5), by King Alfonzo; dam, Inverness	G. W. Trahern	Stockton.
Daisy D, b. m. (6), by Wheatly; dam, Black Maria	B. Cockrill	Salinas.
Al Farrow, b. s. (3), by Connor; dam, Della Walker	M. T. Walters	Lakeview, Or.
Heliotrope, b. m. (3), by Joe Hooker; dam, Yolone	Mrs. S. B. Wolfskill	Santa Monica.
Leon, b. c. (3), by Leinster; dam, Ada A, by Asteriod	F. P. Lowell	Sacramento.

RACE No. 6—RUNNING—Continued.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Moses B, ch. s. (3), by Leinster; dam, Aunt Jane	M. S. Bryan	Phoenix, A. T.
Hermes, b. s. (5), by Wayswater; dam, Herclade	L. A. Blasingame	Fresno.
Brutus (imp.), b. c. (3), by Macgregor; dam, imported Teardrop, by Scottish Chief	Palo Alto Stock Farm	Menlo Park.
Extract, br. f. (3), by Virgil; dam, Tincture	Rancho Del Paso	Sacramento.
Nancy, ch. f. (3), by Jim Brown; dam, Nannie Hubbard	B. C. Holly	Vallejo.
Mart Gibson, ch. c. (3), by Joe Hooker; dam, Jennie Gibson	B. C. Holly	Vallejo.
Sunday, b. g. (4), by Ironclad; dam, Nellie Shannon	Thomas Kinney	Vallejo.
Jack Brady, b. s. (4), by Wildidle; dam, Sour Grapes	W. F. Davis	Copperopolis.
Kildare, ch. g. (3), by Kyrle Daly; dam, Mistake	Thos. G. Jones	Santa Rosa.
Applause, b. g. (4), by Three Cheers; dam, Alice N.	Thos. G. Jones	Santa Rosa.
Not Idle, ch. f. (4), by Wildidle; dam, Bonanza	M. F. Tarpey	Oakland.
Del, bl'k g. (3), by Falsetto; dam, Mattie Severn	Los Angeles Stable	Los Angeles.
Nerva, ch. m. (5), by Bob Wooding; dam, Lizzie Marshall	Wm. Boots	Milpitas.
Valido, b. g. (5), by Bob Wooding; dam, Brown Maria	Wm. Boots	Milpitas.
Nabeau, b. g. (3), by Nathan Coombs; dam, Beauty	Wm. Boots	Milpitas.
Ledon, bl'k g. (3), by Nathan Coombs; dam, Gypsy	Wm. Boots	Milpitas.
Vinco, b. g. (3), by Bob Wooding; dam, Mollie H.	Wm. Boots	Milpitas.

SUMMARY.

Extract (Kelly, 105 pounds)	1
Brutus (Slocum, 108 pounds)	2
Not Idle (Appleby, 115 pounds)	3

Hermes, Heliotrope, Del, Nancy, and Nabeau ran unplaced.

Time—1:58½.

RACE No. 7—RUNNING.

Free purse, two hundred and fifty dollars; of which fifty dollars to second; for all ages. Winners of any race this year to carry five pounds; maidens, if three years old, allowed five pounds; if four years old, or upwards, fifteen pounds. Mile heats.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Etta W, ch. m. (4), by Joe Hooker; dam, by Foster	A. Wakeman	Elk Grove.
Dave Douglas, b. g. (6), by Leinster; dam, Lily Simpson	G. W. Trahern	Stockton.
Hermes, b. s. (5), by Bayswater; dam, Herclade	L. A. Blasingame	Fresno.
Canny Scot, ch. s. (3), by Leinster; dam, Tibbie Dunbar	Oak Grove Stable	Sacramento.
Sid, br. s. (3), by imported Sidarthur; dam, Vestella	B. C. Holly	Vallejo.
Ledor, b. or br. g. (4), by Nathan Coombs; dam, Gypsy	Wm. Boots	Milpitas.

SUMMARY.

Canny Scot (Holloway, 108 pounds)	1 1
Dave Douglas (Dennison, 115 pounds).....	2 2
Ledor (Hart, 95 pounds).....	dis.
Sid (O'Day, 108 pounds)	dis.

Time—1:45 $\frac{1}{2}$; 1:44 $\frac{1}{2}$.

SATURDAY, SEPTEMBER 8, 1888.

RACE No. 8—TROTTING.

Two-year old Stake. Fifty dollars entrance, of which ten dollars must accompany nomination; fifteen dollars payable July first, and remaining twenty-five dollars payable August 10, 1888; three hundred dollars added by the Society. Closed March fifteenth, with sixteen nominations. Mile heats. The following have made third payment:

Name and Pedigree of Horse.	By Whom Entered.	Address.
Palo Alto Belle, br. f., by Electioneer; dam, Beautiful Bells, by The Moor	Palo Alto Stock Farm	Menlo Park.
Sunol, b. f., by Electioneer; dam, Waxana, by General Benton	Palo Alto Stock Farm	Menlo Park.
Kilrain, b. c., by Hawthorne; dam, by Whipple's Hambletonian	L. U. Shippee	Stockton.
Vasolia, b. f., by Stamboul; dam, Inez, by The Moor	L. J. Rose	Los Angeles.
Margaret S, b. f., by Director; dam, May Day, by Cassius M. Clay, Jr.	Pleasanton St'k Farm	Pleasanton.
Fortuna, b. f., by Florida; dam, by George Wilkes	Z. E. Simmons	Lexington, Ky.

SUMMARY.

Margaret S (McDowell)	1 1
Fortuna (Donathan)	2 2
Vasolia (Maben)	dis.
Kilrain (Whiting)	dis.

Time—2:31 $\frac{1}{2}$; 2:31.

RACE No. 9—STALLION STAKE—TROTTING.

The Grand Stallion Stake. Closed March first, with six nominations; five hundred dollars added for each starter up to four. Five hundred dollars entrance, of which two hundred and fifty dollars must accompany nomination; two hundred and fifty dollars payable August 1, 1888. The following have made second payment:

Name and Pedigree of Horse.	By Whom Entered.	Address.
Guy Wilkes, b. s., by George Wilkes; dam, Lady Bunker, by Mambrino Patchen	William Corbitt	San Francisco.
Woodnut, ch. s., by Nutwood; dam, Addie, by Hambletonian Chief	B. C. Holly	Vallejo.
Stamboul, b. s., by Sultan; dam, Fleetwing, by Hambletonian	L. J. Rose	Los Angeles.

SUMMARY.

Woodnut (Holly)	2 1 0 1 1
Guy Wilkes (Goldsmith)	1 2 0 2 2
Stamboul (Maben)	3 3 3 3 3

Time—2:22 $\frac{1}{2}$; 2:16 $\frac{1}{2}$; 2:17 $\frac{1}{2}$; 2:19 $\frac{1}{2}$; 2:21 $\frac{1}{2}$.

RACE No. 10—TROTTING.

2:30 Class. Purse, one thousand dollars.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Rosie Mc, b. m., by Alex Button; dam, Rose-dale	G. W. Woodard	Yolo.
Express, b. g., by Electioneer; dam, Esther, by Express	Palo Alto Stock Farm	Menlo Park.
Elector, b. s., by Electioneer; dam, Lady Babcock	O. A. Hickok	San Francisco.
Ha Ha, br. s., by Nephew; dam, by McCracken's Black Hawk	Houser & Soule	Stockton.
Ben Ali, b. g., by George M. Patchen, Jr.; dam, thoroughbred	J. A. Goldsmith	San Francisco.
Bonanza, ch. s., by Arthurton; dam, Sister, by John Nelson	R. Havey	San Francisco.
Dubec, b. g., by Sultan; dam, Madam Day	L. J. Rose	Los Angeles.
Franklin, blk. g., by General Reno; dam, unknown	Chas. Davis	San Francisco.
Victor, br. s., by Echo; dam, by Woodburn	G. A. Doherty	Crescent Mills.
Judge, b. g.; pedigree unknown	J. A. Dustin	Oakland.

SUMMARY.

Rosie Mc (Goldsmith)	1	1	4	1
Victor (Walsh)	3	2	1	2
Franklin (Donathan)	2	3	2	3
Ha Ha (Houser)	4	4	3	4
Bonanza (Havey)				dis.

Time—2:20 $\frac{3}{4}$; 2:23 $\frac{1}{4}$; 2:23 $\frac{1}{2}$; 2:25.

MONDAY, SEPTEMBER 10, 1888.

RACE No. 11—RUNNING.

The Premium Stake. For all ages. Fifty dollars entrance, h. f., or only fifteen dollars if declared on or before September first, with three hundred and fifty dollars added; of which one hundred dollars to second; third to save stake. Horses that have started and not won this year, allowed five pounds; maidens, if three years old, allowed five pounds; if four years old or over, seven pounds. Three quarters of a mile.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Peregrine, ch. h. (3), by Jumbo or Joe Hooker; dam, Irene Harding	W. M. Murry	Sacramento.
Spray, ch. f. (5), by Joe Hooker; dam, Big Gun	John Clark	Sacramento.
Idalene Cotton, ch. f. (4), by Jim Brown; dam, Lizzie P.	Maltese Villa Stables	Merced.
Jack Brady, b. h. (4), by Wildidle; dam, Sour Grapes	W. L. Davis	Copperopolis.
Blue Bonnet, ch. m. (4), by Joe Hooker; dam, Kate Carson	G. W. Trahern	Stockton.
Daisy D, b. m. (6), by Wheatly; dam, Black Maria	B. Cockrill	Salinas.
Al Farrow, b. h. (3), by Connor; dam, Della Walker	M. T. Walters	Lakeview, Or.
Edelweiss, b. m. (5), by Joe Hooker; dam, Yolone	Mrs. S. B. Wolfskill	Santa Monica.
Welcome, b. f. (3), by Warwick; dam, Aola	D. Hennessy	Sacramento.
Serpolette, ch. f. (3), by Norfolk; dam, Mattie Glenn	Owens Bros.	Fresno.
Johnny Grey, g. g. (aged), by Shiloh; dam, Margery	Owens Bros.	Fresno.
Lucifer, b. c. (3), by Hindoo; dam, by King Alfonso	Rancho Del Paso	Sacramento.
Extract, b. f. (3), by Virgil; dam, Tincture	Rancho Del Paso	Sacramento.

RACE No. 11—RUNNING—Continued.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Nancy, ch. f. (3), by Jim Brown; dam, Nannie Hubbard	B. C. Holly	Vallejo.
Kildare, ch. g. (3), Kyrle Daly; dam, Mistake ..	T. G. Jones	Santa Rosa.
Applause, b. g. (4), by Three Cheers; dam, Alice N	T. G. Jones	Santa Rosa.
Not Idle, ch. f. (4), by Wildidle; dam, Bonanza.	M. F. Tarpey	Oakland.
Futurity, br. or blk. f. (2), by John A; dam, Ella Doane	W. L. Appleby	Santa Clara.
Carmen, ch. f. (3), by Wildidle; dam, Nettie Brown	W. L. Appleby	Santa Clara.
Carmelita, b. m. (4), by Hardwood; dam, by Shiloh	B. P. Hill	El Cajon.
Mikado, ch. g. (4), by Shiloh; dam, by Error ..	B. P. Hill	El Cajon.
Ariola, b. m. (7), by Bob Wooding; dam, Glad-iola	William Boots	Milpitas.
Valido, b. g. (5), by Bob Wooding; dam, Brown Maria	William Boots	Milpitas.
Sleepy Dick, ch. g. (aged), pedigree unknown ..	F. M. Starkey	Stockton.

SUMMARY.

Daisy D (Hennessy, 115 pounds)	1
Not Idle (Hitchcock, 110 pounds)	2
Applause (Holloway, 115 pounds)	3

Sleepy Dick, Peregrine, Welcome, Al Farrow, Extract, Idalene Cotton, and Edelweiss ran unplaced.

Time—1:14 $\frac{3}{4}$.

RACE No. 12—RUNNING.

California Annual Stake. For foals of 1886, to be run at the State Fair of 1888. One hundred dollars entrance; twenty-five dollars forfeit, or only ten dollars if declared January 1, 1888; two hundred and fifty dollars added, of which one hundred dollars to second; fifty dollars to third. One mile.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Philander, ch. c., by Wildidle; dam, Precious, by Lever	Palo Alto Stock Farm	Menlo Park.
Rhona, ch. c., by Flood; dam, imp. Rosetta	Palo Alto Stock Farm	Menlo Park.
Kenneth, b. c., by Joe Hooker; dam, Katharion.	George Hearst	San Francisco.
Geoffrey, b. c., by Flood; dam, Glendew	Palo Alto Stock Farm	Menlo Park.
Flood Tide, b. c., by Flood; dam, Lady Evange-line	R. P. Ashe	San Francisco.
Picnic, br. f., by imp. Mr. Pickwick; dam, imp. Countess	L. U. Shippee	Stockton.
Ella Hill, b. f., by Wildidler; dam, Phoebe Hall.	J. G. Hill	Los Angeles.
Hotspur, b. c., by Joe Daniels; dam, sister to Douglass	W. B. Todhunter	Sacramento.
Longshot, ch. c., by Duke of Norfolk; dam, by Longfellow	J. A. McBride	Sacramento.
Little Rose, ch. f., by Joe Hooker; dam, Roset-land	Thomas Atchison	San Francisco.
Sonoma, ch. f., by Longfield; dam, Carrie C	H. I. Thornton	San Francisco.
Regina, ch. f., by Joe Hooker; dam, Hattie Ball.	H. I. Thornton	San Francisco.
Don José, ch. c., by Joe Hooker; dam, Countess Zeika	Theo. Winters	Sacramento.
The Czar, ch. c., by Norfolk; dam, Marian	Theo. Winters	Sacramento.
Bronco, ch. c., by Joe Hooker; dam, Laura Winston	Theo. Winters	Sacramento.
Telish, ch. or b. c., by Norfolk; dam, Ballinette.	Theo. Winters	Sacramento.
Leh, b. c., by Joe Hooker; dam, Illusion	Theo. Winters	Sacramento.
Lady Overton, b. f., by imp. Partisan; dam, Pet.	C. Dorsey	Oakdale.

RACE No. 12—RUNNING—Continued.

Name and Pedigree of Horse.	By Whom Entered.	Address.
March Wind, b. f., by imp. Partisan; dam, Mattie	C. Dorsey	Oakdale.
Robin Hood, b. c., by Flood; dam, Robin Girl	W. M. Murry	Sacramento.
N Y M, b. c., by Shannon; dam, Demirep	W. M. Murry	Sacramento.
Almont, b. c., by Three Cheers; dam, Question	W. M. Murry	Sacramento.
Queen Daniels, b. f., by Joe Daniels; dam, Emma	John Arnett	Pleasanton.
Wild Oats, b. c., by Wildidle; dam, Mary Givens	W. L. Appleby	Santa Clara.
Lakme, ch. f., by John A; dam, Lottie J	Laurelwood Stables	Santa Clara.
Duke Spencer, b. c., by Duke of Norfolk; dam, Lou Spencer	W. H. Hobbs	San Francisco.
Persuasion, b. c., by Storey; dam, Occasion	C. Schlutius	Sacramento.

NOTE.—Ecart, Scat, Ernestine, Kathlene, Freeloze, declared January first, at ten dollars each.

SUMMARY.

Almont (Lloyd, 110 pounds)	1
Don José (Holloway, 110 pounds)	2
Picnic (Courtney, 107 pounds)	3

Time—1:42 $\frac{3}{4}$.

RACE No. 13—RUNNING.

The La Rue Stake. Handicap for all ages. One hundred dollars entrance; fifty dollars forfeit, with five hundred dollars added, of which one hundred and fifty dollars to second; one hundred dollars to third. Weights announced September first. Declaration, twenty dollars; to be made with the Secretary by eight o'clock p. m., September third. In no event will declaration be received unless accompanied with the amount fixed. Two and one quarter miles.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Dave Douglas, b. h. (6), by Leinster; dam, Lily Simpson	G. W. Trahern	Stockton.
Leon, b. h. (3), by Leinster; dam, Ada A	F. P. Lowell	Sacramento.
Moses B, ch. h. (3), by Leinster; dam, Aunt Jane	M. S. Bryan	Phoenix, A. T.
Hermes, b. s. (5) by Bayswater; dam, Herclade	L. A. Blasingame	Fresno.
Canny Scot, ch. h. (3), by Leinster; dam, Tibbie Dunbar	Oak Grove Stable	Sacramento.
Laura Gardner, ch. m. (4), by Jim Brown; dam, Avail	W. L. Appleby	Santa Clara.
Carmen, ch. f. (3), by Wildidle; dam, Ella Doane	W. L. Appleby	Santa Clara.
Index, blk. g. (6), by Thad Stevens; dam, Gypsy	Wm. Boots	Milpitas.
Ledor, br. g. (4), by Nathan Coombs; dam, Gypsy	Wm. Boots	Milpitas.

SUMMARY.

Canny Scot (Cook; entitled weight, 104 pounds; weight, 102 pounds)	1
Index (Hart; entitled weight, 118 pounds; weight, 100 pounds)	2
Laura Gardner (Howson; entitled weight, 115 pounds; weight, 116 pounds) ..	3

Dave Douglas, Hermes, and Leon ran unplaced.

Time—4:02.

RACE No. 14—RUNNING.

Selling purse, three hundred dollars, of which fifty dollars to second; for all ages. Horses entered to be sold for one thousand five hundred dollars to carry rule weights; two pounds allowed for each one hundred dollars less, down to one thousand dollars, then one pound for each one hundred dollars less, down to five hundred dollars. Valuation to be placed on starters only, by six o'clock P. M. the day preceding the race. One mile and a sixteenth.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Elwood, ch. g. (4), by Norfolk; dam, Ballinette.	Maltese Villa Stables ..	Merced.
Etta W, ch. m. (4), by Joe Hooker; dam, by Foster	A. Wakeman	Elk Grove.
J M R, ch. h. (3), by imported Kelpie; dam, by Joe Daniels	J. Woodburn	Sacramento.
Blackstone, blk. s. (4), by Wildidle; dam, by Monday	F. Depoister	Sacramento.
Oro, b. s. (4), by Norfolk; dam, Golden Gate...	Owens Bros.	Fresno.
Pickpocket, ch. h. (5), by Joe Daniels; dam, Mattie C	Robert Munroe	Oakdale.
Fusilade's Last, ch. f. (3), by J. W. Norton; dam, Fusilade	B. C. Holly	Vallejo.
Wild Oats, br. c. (2), by Wildidle; dam, Mary Givens	W. L. Appleby	Santa Clara.
Gladstone, ch. g. (4), by Reveille; dam, by Hamilton	B. P. Hill	El Cajon.
Adam, ch. g. (6), by Shiloh; dam, unknown	B. P. Hill	El Cajon.
Nerva, ch. m. (5), by Bob Wooding; dam, Lizzie Marshall	Wm. Boots	Milpitas.

SUMMARY.

Elwood, \$800 (Cook; entitled weight, 115 pounds; weight, 103 pounds)	1
Oro, \$500 (Howson; entitled weight, 118 pounds; weight, 103 pounds)	2
Nerva, \$1,000 (Hart; entitled weight, 115 pounds; weight, 105 pounds)	3
Fusilade's Last at \$1,000, Blackstone at \$500, and Wild Oats at \$2,400, ran unplaced.	

Time—1:51.

TUESDAY, SEPTEMBER 11, 1888.

RACE No. 15—TROTTING.

Three-year Old Stake. One hundred dollars entrance, of which twenty-five dollars must accompany nomination; twenty-five dollars payable July first; remaining fifty dollars payable August 10, 1888; \$400 added. Closed March fifteenth, with nineteen nominations. The following have made third payment:

Name and Pedigree of Horse.	By Whom Entered.	Address.
Balkin, br. c., by Mambrino Wilkes; dam, Fanny Fern, by Jack Hawkins	Irving Ayres	Oakland.
Monteith, b. c., by Electioneer; dam, Mamie C, by imported Hercules	Palo Alto Stock Farm	Menlo Park.
Moses S, b. c., by Hawthorne; dam, by McCracken's Black Hawk	L. U. Shippee	Stockton.
Grandee, b. g., by Le Grand; dam, Minnie, by Arthurton	Wm. Corbitt	San Francisco.
Direct, blk. c., by Director; dam, Echora	Pleasanton St'k Farm	Pleasanton.
Memo, b. c., by Sidney; dam, Flirt	J. P. Kerr	San Francisco.

SUMMARY.

Grandee (Goldsmith)	1	1	1
Balkan (Hinds)	2	2	3
Direct (McDowell)	4	3	2
Moses S (Whiting)	3	4	4

Time—2:30; 2:28½; 2:29.

RACE No. 16—TROTTING.

2:20 Class. Purse, one thousand two hundred dollars.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Kate Ewing, blk. m., by Berlin; dam, Lady Washington.....	A. Gonzales.....	San Francisco.
Woodnut, ch. h., by Nutwood; dam, Addie.....	B. C. Holly.....	Vallejo.
Lily Stanley, b. m., by Whippleton; dam, Dollie McMahan.....	N. Coombs.....	Napa.
Alfred S, b. g., by Elmo; dam, Nora Marshall.....	H. W. Seale.....	Mayfield.
Alcazar, b. c., by Sultan; dam, Minnehaha.....	L. J. Rose.....	Los Angeles.
Mt. Vernon, b. s., by Nutwood; dam, by Chief-tain.....	M. Salsbury.....	Pleasanton.

SUMMARY.

Woodnut (Holly).....	1	1	1
Lily Stanley (Hickok).....	2	2	3
Mt. Vernon (McDowell).....	3	3	2

Time—2:22½; 2:22½; 2:22¼.

RACE No. 17—TROTTING.

3:00 Class. Purse, one thousand dollars.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Blockade, b. g.; pedigree unknown.....	Marion Biggs, Jr.....	Biggs.
Perihelion, b. h., by Admiral; dam, Flora.....	W. S. Ray.....	San Francisco.
Ross S, b. h., by Nutwood; dam, by State of Maine.....	R. S. Sargent.....	Lodi.
Economy, b. f., by Echo; dam, Lady Berkeley.....	B. C. Holly.....	Vallejo.
Steve Whipple, br. s., by Chrisman's Hambletonian; dam, by Whipple's Hambletonian.....	C. E. Needham.....	Stockton.
Maggie E, br. m., by Nutwood; dam, by Geo. M. Patchen, Jr.....	S. B. Emerson.....	Mountain View.
Lady Escott, ch. m.; pedigree unknown.....	J. A. Dustin.....	Oakland.

SUMMARY.

Maggie E (Donathan).....	1	1	1
Steve Whipple (Parker).....	2	2	3
Perihelion (David).....	4	3	2
Ross S (Ober).....	3	4	4

Time—2:26½; 2:23; 2:30.

WEDNESDAY, SEPTEMBER 12, 1888.

RACE No. 18—RUNNING.

The Sunny Slope Stake. For two-year old fillies. Entrance, twenty-five dollars; fifteen dollars forfeit, or only ten dollars if declared on or before September first; two hundred dollars added, of which twenty-five dollars to second. Those that have started and not run first or second in any race this year, allowed five pounds. Five eighths of a mile.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Bessie Shannon, b. f., by Shannon; dam, Bettie Bishop	J. Reavey & Co.	Sacramento.
Little Rose, ch. f., by Joe Hooker; dam, Rosetland	Thomas Atchison	San Francisco.
Picnic, br. f., by imp. Mr. Pickwick; dam, imp. Countess	L. U. Shippee	Stockton.
Libbertiffibbet, b. f., by Bullion; dam, Flibbertigibbet	L. U. Shippee	Stockton.
Glencola, b. f., by Glengarry; dam, Marcola	L. U. Shippee	Stockton.
Aurelia, b. f., by Wildidle; dam, Amelia, by Lowlander	Palo Alto Stock Farm	Menlo Park.
Faustine, b. f., by Flood; dam, imp. Flirt, by The Hermit	Palo Alto Stock Farm	Menlo Park.
Futurity, br. f., by John A; dam, Ella Doane	W. L. Appleby	Santa Clara.
Lady Helen, b. f., by Norfolk; dam, Jessie R	Thos. H. Williams	Stockton.
Odette, br. f., by Shiloh; dam, by Error	B. P. Hill	El Cajon.

SUMMARY.

Faustine (Hitchcock, 107 pounds)	1
Picnic (Hart, 102 pounds)	2
Bessie Shannon (Lloyd, 107 pounds)	3
Futurity, 102, and Libbertiffibbet, 102, ran unplaced.	
Time—1:02 $\frac{1}{4}$.	

RACE No. 19—RUNNING.

The Shafter Stake. For three-year olds. Fifty dollars entrance; twenty-five dollars forfeit, or only fifteen dollars if declared on or before September first; with four hundred dollars added; of which one hundred dollars to second; third to save stake. Winner of any race this year to carry five pounds extra; of two or more, ten pounds; maidens allowed five pounds. One mile and a quarter.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Heliotrope, b. m., by Joe Hooker; dam, Yolone	Mrs. S. B. Wolfskill	Santa Monica.
Brutus, imp., b. c., by McGregor; dam, imp. Teardrop, by Scottish Chief	Palo Alto Stock Farm	Menlo Park.
Extract, br. f., by Virgil; dam, Tincture	Rancho Del Paso	Sacramento.
Lucifer, b. c., by Hindoo; dam, by King Alfonso	Rancho Del Paso	Sacramento.
Kildare, ch. g., by imp. Kyrle Daly; dam, Mistake	T. G. Jones	Santa Rosa.
Del, blk. g., by Falsetto; dam, Mattie Severn	Los Angeles Stable	Los Angeles.
Vinco, br. g., by Bob Wooding; dam, Mollie H. Nabeau, b. g., by Nathan Coombs; dam, Beauty	William Boots	Milpitas.
Ledon, blk. g., by Nathan Coombs; dam, Gypsy	William Boots	Milpitas.

SUMMARY.

Brutus (Courtney, 113 pounds)	1
Heliotrope (Carrillo, 110 pounds)	2
Extract (Kelly, 120 pounds)	3
Del (Hoag, 110 pounds)	0
Ledon (O'Neil, 110 pounds)	0
Nabeau (Hill, 110 pounds)	0
Time—2:11.	

RACE No. 20—RUNNING.

The Del Paso Stake. For all ages. Fifty dollars entrance; twenty-five dollars forfeit, or only fifteen dollars if declared on or before September first, with three hundred dollars added; of which one hundred dollars to second; third to save stake. Three-year olds to carry one hundred pounds; four-year olds, one hundred and ten pounds; five-year olds and upwards, one hundred and twelve pounds. Sex, but not heat allowances. Three-quarter mile heats.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Elwood, ch. g. (4), by Norfolk; dam, Ballinette.	Maltese Villa Stables.....	Merced.
Jack Brady, b. h. (4), by Wildidle; dam, Sour Grapes	W. L. Davis.....	Copperopolis.
Peregrine, ch. h. (3), by Jumbo or Joe Hooker; dam, Irene Harding.....	W. M. Murry.....	Sacramento.
Blue Bonnet, ch. m. (4), by Joe Hooker; dam, Lily Simpson.....	G. W. Trahern.....	Stockton.
Daisy D, b. m. (6), by Wheatly; dam, Black Maria.....	B. Cockrill.....	Salinas.
Heliotrope, b. m. (3), by Joe Hooker; dam, Yolone.....	Mrs. S. B. Wolfskill.....	Santa Monica.
Welcome, br. f. (3), by Warwick; dam, Eola.....	D. Hennessy.....	Sacramento.
Serpolette, ch. f. (3), Norfolk; dam, Mattie Glenn	Owens Bros.....	Fresno.
Sid, br. c. (3), Sid Arthur; dam, Vestella	B. C. Holly.....	Vallejo.
Not Idle, ch. m. (4), by Wildidle; dam, Bonanza	M. F. Tarpey.....	Oakland.
Carmen, ch. f. (3), by Wildidle; dam, Nettie Brown.....	W. L. Appleby.....	Santa Clara.
Carmelita, b. m. (4), by Hardwood; dam, by Shiloh.....	B. P. Hill.....	El Cajon.
Gladstone, ch. g. (4), by Reveille; dam, by Hamilton.....	B. P. Hill.....	El Cajon.

SUMMARY.

Not Idle (Hitchcock, 109 pounds).....	2	1	1
Peregrine (Lloyd, 110 pounds).....	1	2	2
Jack Brady (Casey, 110 pounds).....	5	3	r. o.
Elwood (Cook, 107 pounds).....	3	4	r. o.
Blue Bonnet (Hennessy, 107 pounds).....	4	5	r. o.

Time—1:15; 1:15½; 1:16.

RACE No. 21—RUNNING.

Free purse, three hundred dollars, of which fifty dollars to second. For all ages. Horses that have started and not won at this meeting allowed ten pounds. Winners of any race at this meeting, when carrying rule weights, or more, to carry five pounds extra. One mile.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Idalene Cotton, ch. f. (4), by Tim Brown; dam, Lizzie P.....	Maltese Villa Stables.....	Merced.
Spray, ch. f. (5), by Joe Hooker; dam, Big Gun.	John Clark.....	Sacramento.
J M R, ch. h. (3), by imported Kelpie; dam, by Joe Daniels.....	James Woodburn.....	Sacramento.
Haidee, b. m. (5), by King Alfonso; Inverness.	G. W. Trahern.....	Stockton.
Al Farrow, b. s. (3), by Connor; dam, Della Walker.....	M. T. Walters.....	Lakeview, Or.
Edelweiss, br. m. (5), by Joe Hooker; dam, Yolone.....	Mrs. S. B. Wolfskill.....	Santa Monica.
Little Phil, ch. c. (2), by Leinster; dam, Lily H.	T. Bally.....	Sacramento.
Oro, b. s. (4), by Norfolk; dam, Golden Gate.....	Owens Bros.....	Fresno.
Pickpocket, ch. h. (5), by Joe Daniels; dam, Mattie C, by Specter.....	Robert Munroe.....	Oakdale.
Fusilade's Last, ch. f. (3), by J. W. Norton; dam, Fusilade.....	B. C. Holly.....	Vallejo.

RACE No. 21—RUNNING—Continued.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Sunday, b. g. (4), by Ironclad; dam, Nellie Shannon	B. C. Holly	Vallejo.
Futurity, blk. f. (2), by John A; dam, Ella Doane	W. L. Appleby	Santa Clara.
Wild Oats, b. c. (2), by Wildidle; dam, Mary Givens	W. L. Appleby	Santa Clara.
Del, blk. g. (3), by Falsetto; dam, Mattie Severn	Los Angeles Stable	Los Angeles.
Mikado, ch. g. (4), by Shiloh; dam, by Error	B. P. Hill	El Cajon.
Adam, ch. g. (6), by Shiloh; dam, unknown	B. P. Hill	El Cajon.
Nerva, ch. m. (5), by Bob Wooding; dam, Lizzie Marshall	Wm. Boots	Milpitas.

SUMMARY.

Edelweiss (Hazlett, 105 pounds)	1
Idalene Cotton (Cook, 105 pounds)	2
Haidee (Dennison, 115 pounds)	3
J M R (Lloyd, 108 pounds)	0
Fusilade's Last, (O'Day, 95 pounds)	0
Wild Oats (Ward, 71 pounds)	0
Oro (Howson, 108 pounds)	0
Al Farrow (Sparger, 98 pounds)	0
Nerva (Hart, 105 pounds)	0

Time—1:43 $\frac{1}{4}$.

THURSDAY, SEPTEMBER 13, 1888.

SPECIAL RUNNING RACE.

Purse, two hundred and fifty dollars, of which fifty dollars to second. Horses beaten once at this meeting allowed five pounds; twice, ten pounds. Entries closed at eleven A. M. September 13, 1888. Seven eighths of a mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Kildare, ch. g. (3), by imp. Kyrle Daly; dam, Mistake	T. G. Jones	Santa Rosa.
Oro, b. s. (4), by Norfolk; dam, Golden Gate	Owens Brothers	Fresno.
Blue Bonnet, ch. m. (4), by Joe Hooker; dam, Lily Simpson	G. W. Trahern	Stockton.

SUMMARY.

Blue Bonnet (Dennison, 105 pounds)	1	2	1
Kildare (Cook, 106 pounds)	2	1	2
Oro (Howson, 107 pounds)	3	3	r. o.

NOTE.—After the first heat Hitchcock was by the Judges put on Kildare.

Time—1:30 $\frac{3}{4}$; 1:30; 1:32 $\frac{3}{4}$.

RACE No. 22—TROTTING.

2:25 Class. Purse, one thousand dollars.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Don Tomas, blk. g., by Del Sur; dam, Vasti, by Mambrino Patchen	C. A. Durfee	Los Angeles.
John R, blk. g., by Startle; dam, by Belmont	F. B. Glenn	Jacinto.
Ha Ha, br. s., by Nephew; dam, by McCracken's Black Hawk	Houser & Soule	Stockton.
Allo, br. s., by Altoona; dam, Nellie, by son of Vermont Black Hawk	A. C. Davenport	Stockton.
Eros, br. s., by Electioneer; dam, Sontag Mohawk	La Siesta Ranch	Menlo Park.
Artist, blk. g., by Golddust; dam, by Dave Hill, Jr.	J. R. Hodson	Sacramento.
Alpheus, b. h., by Mambrino Wilkes; dam, by Major Mono	A. L. Hinds	Oakland.
Eva W, ch. m., by Nutwood; dam, unknown	S. C. Tryon	Sacramento.
Longfellow, ch. g., by Whipple's Hambletonian; dam, unknown	H. W. Seale	Mayfield.
Victor, b. s., by Echo; dam, by Woodburn	G. A. Doherty	Crescent Mills.

SUMMARY.

Victor (Doherty)	1	1	1
Don Tomas (Durfee)	2	3	2
Allo (Dustin)	3	4	3
Eva W (McConnell)	5	2	4
Alpheus (Hinds)	6	5	5
Ha Ha (Houser)	4	6	dis.
Artist (Shaner)	7	dis.	
John R (Johnson)		dis.	

Time—2:25½; 2:22¼; 2:24½.

RACE No. 23—TROTTING.

Four-year Old Trotting Stake. Closed on March fifteenth, with twelve nominations. Four hundred dollars added. (Conditions same as No. 15.) Third payment has been made on the following:

Name and Pedigree of Horse.	By Whom Entered.	Address.
Ella, b. f., by Electioneer; dam, Lady Ellen	Palo Alto Stock Farm	Menlo Park.
Carlisle, ch. c., by Piedmont; dam, Idabella	Palo Alto Stock Farm	Menlo Park.
Moses S, b. c., by Hawthorne; dam, by McCracken's Black Hawk	L. U. Shippee	Stockton.
Dubec, b. g., by Sultan; dam, by Cal. Dexter	L. J. Rose	Los Angeles.

SUMMARY.

Dubec (Maben)	1	1	1
Moses S (Whiting)	2	2	2

Time—2:28½; 2:29¾; 2:34½.

RACE NO. 24—PACING.

Free for all. Purse, eight hundred dollars.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Belmont Boy, ch. g., by Nutwood; dam, Lady Vernon	C. S. Roberts	San José.
Pocahontas, ch. m., by Washington; dam, by Glencoe	S. C. Tryon	Sacramento.
Ned Winslow, blk. g., by Tom Benton; dam, by 2 nd Dave Hill, Jr.	J. L. McCord	Sacramento.
Damiana, ch. g., by Admiral; dam, unknown	L. E. Clawson	San Francisco.
Almont Patchen, br. s., by Juanito; dam, Gladys, by Gladiator	W. M. Bil ups	Colusa.
Bracelet, b. g., by Nephew; dam, by Mambrino	J. R. Hodson	Sacramento.
Elwood, b. m., by A. W. Richmond; dam, Creighton's First, by Creighton	C. A. Durfee	Los Angeles.
San Diego, b. g. (formerly Yolo), by Victor; dam, thoroughbred	H. C. Airhart	San Diego.

SUMMARY.

Almont Patchen (Sullivan)	4	1	1	1
San Diego (Walsh)	1	3	4	3
Belmont Boy (Bayless)	2	2	2	2
Ned Winslow (McCord)	3	4	3	4
Pocahontas (McConnell)	7	6	5	5
Bracelet (Donathan)	5	5	dis.	
Damiana (McDowell)	6	dis.		

NOTE.—Postponed after second heat, on account of darkness. Finished Sept. 14, 1888.

Time—2:21; 2:21; 2:22; 2:22½.

FRIDAY, SEPTEMBER 14, 1888.

RACE NO. 25—RUNNING.

The California Derby Stake. For foals of 1885, to be run at the State Fair of 1888. Entrance, one hundred dollars; fifty dollars forfeit, or only ten dollars if declared January 1, 1887; fifteen dollars if declared January 1, 1888; twenty-five dollars if declared May 1, 1888; three hundred dollars added, of which one hundred dollars to second; fifty dollars to third. One mile and a half.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Donald, g. c., by Joe Hooker; dam, Lexington Belle	J. B. Haggin	Sacramento.
Phantom, ch. c., by Joe Hooker; dam, Cordelia Planet	Harry Howard	San Francisco.
Sunset, ch. c., by King Alfonso; dam, Fashionette	W. M. Murry	Sacramento.
Partisan, br. c., by imported Partisan; dam, Mamie	C. Dorsey	Oakdale.
Troubler, br. c., by imported Partisan; dam, Partisana	C. Dorsey	Oakdale.
Theo. Winters, ch. c., by Joe Hooker; dam, Mattie C.	Matt. Storn	Oakland.
Surinam, b. c., by Joe Hooker; dam, Ada C.	Geo. Hearst	San Francisco.
Leon, b. c., by Leinster; dam, Addie A.	F. P. Lowell	Sacramento.
Canny Scot, ch. c., by Leinster; dam, Tibbie Dunbar	W. L. Pritchard	Sacramento.
Verona, ch. f., by Jim Gannon; dam, Lizzie P.	Phil. Siebenthaler	Sacramento.
Ledon, blk. g., by Nathan Coombs; dam, Gypsy	Wm. Boots	Milpitas.
Vinco, b. g., by Bob Wooding; dam, Mollie H.	Wm. Boots	Milpitas.
Nabeau, b. g., by Nathan Coombs; dam, Beauty	Wm. Boots	Milpitas.
King Idle, br. c., by Wildidle; dam, Augusta E.	W. B. Todhunter	Sacramento.
Pocatello, ch. c., by Joe Hooker; dam, Countess Zeika	W. B. Todhunter	Sacramento.

RACE NO. 25—RUNNING—Continued.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Snowdrop, ch. f., by Joe Hooker; dam, Laura Winston.....	James Garland.....	 Sacramento.
Alma E, br. f. (formerly Tricky), by Joe Hooker; dam, Abbie W.....	C. H. Eldred.....	 Sacramento.
Bolero, b. or br. c., by Norfolk; dam, Neapolitan.....	D. J. McCarty.....	 San Francisco.
Emperor of Norfolk, b. c., by Norfolk; dam, Marian.....	E. J. Baldwin.....	 San Francisco.
Coloma, ch. c., by Joe Hooker; dam, Callie Smart.....	W. L. Whitmore.....	 Portland, Or.
Peel, b. c., by Monday; dam, Precious.....	Palo Alto Stock Farm.....	 Menlo Park.

SUMMARY.

Peel (Courtney, 118 pounds).....	1
Snowdrop (Kelly, 115 pounds).....	2
Canny Scot (Holloway, 118 pounds).....	3
Leon (Bally, 118 pounds).....	0

Time—2:38½.

NOTE.—Peter, Jr., Ceres, declared January 1, 1887, at \$10 each. General Gordon, Bruce, Winrow, Brutus, declared January 1, 1888, at \$15 each. Glimpse, Kyrle D, declared May 1, 1888, at \$25 each.

RACE NO. 26—RUNNING.

The Palo Alto Stake. A handicap for two-year olds. Fifty dollars entrance; twenty-five dollars forfeit; ten dollars declaration; four hundred dollars added; of which one hundred dollars to second; third to save stake. Weights announced at 10 o'clock a. m., Saturday, September first. Declarations due at eight o'clock p. m., Monday, September third. One mile.

Name and Pedigree of Horse.	By Whom Entered.	Address.
G. W, b. g., by Kyrle Daly; dam, by Thad Stevens.....	G. W. Trahern.....	 Stockton.
Albatross, b. g., by Pillbox; dam, Della Walker.....	M. T. Walters.....	 Lakeview, Or.
The Czar, ch. c., by Norfolk; dam, Marian.....	Theo. Winters.....	 Sacramento.
Barham, b. c., by Norfolk; dam, sister to Lottery.....	Theo. Winters.....	 Sacramento.
Don José, ch. c., by Joe Hooker; dam, Countess Zeika.....	Theo. Winters.....	 Sacramento.
Bronco, ch. c., by Joe Hooker; dam, Laura Winston.....	Theo. Winters.....	 Sacramento.
Bessie Shannon, b. f., by Shannon; dam, Bettie Bishop.....	J. Reavey & Co.....	 Sacramento.
Little Phil, ch. c., by Leinster; dam, Lily H.....	T. Bally.....	 Sacramento.
Duke Spencer, b. c., by Duke of Norfolk; dam, Lou Spencer.....	F. Depoister.....	 Sacramento.
Glencola, b. f., by imp. Glengary; dam, Marcola.....	L. U. Shippee.....	 Stockton.
Picnic, br. f., by imp. Mr. Pickwick; dam, imp. Countess.....	L. U. Shippee.....	 Stockton.
Shannon Rose, b. f., by Shannon; dam, imp. Rose, by Kisber.....	Palo Alto Stock Farm.....	 Menlo Park.
Aurelia, b. f., by Wildidle; dam, Amelia, by Lowlander.....	Palo Alto Stock Farm.....	 Menlo Park.
Faustine, b. f., by Flood; dam, imp. Flirt, by The Hermit.....	Palo Alto Stock Farm.....	 Menlo Park.
Reward, b. g., by Jim Brown; dam, Trophy.....	Rancho del Paso.....	 Sacramento.
Joe Hoge, ch. c., by Joe Hooker; dam, Viola R.....	H. I. Thornton.....	 San Francisco.
Young Prince, b. h., by imp. Young Prince; dam, Mercedes (dead).....	.....	.....
Jack Pot, b. g., by Joe Hooker; dam, Mistake.....	T. G. Jones.....	 Santa Rosa.
Wild Oats, b. c., by Wildidle; dam, Mary Givens.....	W. L. Appleby.....	 Santa Clara.
Futurity, blk. f., by John A; dam, Ella Doane.....	W. L. Appleby.....	 Santa Clara.
Naicho B, ch. g., by Wanderer; dam, Flower Girl.....	Los Angeles Stable.....	 Los Angeles.

SUMMARY.

The Czar (Carrillo, 110 pounds).....	1
Wild Oats (Hitchcock, 95 pounds).....	2
Shannon Rose (Tompkins, 107 pounds).....	3
Futurity (Murphy, 90 pounds).....	0
Naicho B (Keene, 90 pounds).....	0
Reward (Hart, 95 pounds).....	0
Duke Spencer (Cook, 103 pounds).....	0

Time, 1:44.

RACE No. 27—RUNNING.

The Golden Gate Stake. For three-year olds. Fifty dollars entrance. Twenty-five dollars forfeit, or only fifteen dollars if declared on or before September first; with four hundred dollars added, of which one hundred dollars to second; third to save stake. Winner of any three-year old race at this meeting to carry five pounds extra; colts not 1, 2, 3, in No. 19, allowed ten pounds. One mile and three quarters.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Sunset, ch. h., by King Alfonso; dam, Fashionette.	W. M. Murry.....	Sacramento.
Moses B, ch. s., by Leinster; dam, Aunt Jane.	M. S. Bryan.....	Phoenix, A. T.
Peel, b. c., by Monday; dam, Precious, by Lever.	Palo Alto Stock Farm.....	Menlo Park.
Brutus (imp.), b. c., by Macgregor; dam, imp. Teardrop, by Scottish Chief.	Palo Alto Stock Farm.....	Menlo Park.
Carmen, ch. f., by Wildidle; dam, Nettie Brown.	W. L. Appleby.....	Santa Clara.
Vinco, b. g., by Bob Wooding; dam, Mollie H.	William Boots.....	Milpitas.
Nabeau, b. g., by Nathan Coombs; dam, Beauty.	William Boots.....	Milpitas.
Ledon, blk. g., by Nathan Coombs; dam, Gypsy.	William Boots.....	Milpitas.

SUMMARY.

Moses B (Carrillo, 118 pounds).....	1
Brutus (Courtney, 123 pounds).....	2
Nabeau (O'Neil, 105 pounds).....	3

Time—3:08½.

RACE No. 28—RUNNING.

The Nighthawk Stake. For all ages. Fifty dollars entrance. Fifteen dollars forfeit; three hundred dollars added, of which one hundred dollars to second; third to save stake; two hundred dollars additional if 1:41½ is beaten. Stake to be named after the winner if Nighthawk's time (1:42½) is beaten. One mile.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Idealene Cotton, ch. f. (4), by Jim Brown; dam, Lizzie P.	Maltese Villa Stables.....	Merced.
Almont, b. h. (2), by Three Cheers; dam, Question.	W. M. Murry.....	Sacramento.
Spray, ch. f. (5) (formerly Queen Kapiolana), by Joe Hooker; dam, Big Gun.	J. Clark.....	Sacramento.
Jack Brady, b. h. (4), by Wildidle; dam, Sour Grapes.	W. L. Davis.....	Sacramento.
Daisy D, b. m. (6), by Wheatly; dam, Black Maria.	B. Cockrill.....	Salinas.
Al Farrow, b. s. (3), by Connor; dam Della Walker.	M. T. Walters.....	Lakeview, Or.
Edelweiss, b. m. (5), by Joe Hooker; dam, Yelone.	Mrs. S. B. Woliskill.....	Santa Monica.
Welcome, br. f. (3), by Warwick; dam, Eola.	D. Hennessy.....	Sacramento.
Hermes, b. s. (5), by Bayswater; dam, Herclade.	L. A. Blasingame.....	Fresno.
Canny Scot, ch. c. (3), by Leinster; dam, Tibbie Dunbar.	Oak Grove Stables.....	Sacramento.

RACE No. 28—RUNNING—Continued.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Leap Year, b. m. (4), by Norfolk; dam, Lady Jane	L. A. Blasingame	Fresno.
Brutus (imp.), b. c. (3), by Macgregor; dam, imp. Teardrop	Palo Alto Stock Farm	Menlo Park.
Nancy, ch. f. (3), by Jim Brown; dam, Nannie Hubbard	B. C. Holly	Vallejo.
Applause, b. g. (4), by Three Cheers; dam, Alice N	T. G. Jones	Oakland.
Carmen, ch. f. (3), by Wildidle; dam, Nettie Brown	W. L. Appleby	Santa Clara.
Wild Oats, b. c. (2), by Wildidle; dam, Mary Givens	W. L. Appleby	Santa Clara.
Not Idle, ch. f. (4), by Wildidle; dam, Bonanza	M. F. Tarpey	Oakland.
Naicho B, ch. g. (2), by Wanderer; dam, Flower Girl	Los Angeles Stable	Los Angeles.
Del, blk. g. (3), by Falsetto; dam, Mattie Severn	Los Angeles Stable	Los Angeles.
Carmelita, b. m. (4), by Hardwood; dam, Shiloh	Al. Morine	Los Angeles.
Mikado, ch. g. (4), by Shiloh; dam, by Error	B. P. Hill	El Cajon.
John Treat, g. g. (5), by Shiloh; dam, by Norfolk	Al. Morine	Los Angeles.
Valido, br. g. (5), by Bob Wooding; dam, Brown Maria	William Boots	Milpitas.
Ariola, b. m. (5), by Bob Wooding; dam, Glad-iola	William Boots	Milpitas.
Index, blk. g. (6), by Thad Stevens; dam, Gypsy	William Boots	Milpitas.
Four Aces, ch. c. (2), by Hock Hocking; dam, Maid of the Mist	John D. Dunn	Los Angeles.

SUMMARY.

Almont (Madden, 81 pounds)	1
Daisy D (Hennessy, 115 pounds)	2
Edelweiss (Hazlett, 115 pounds)	3
Idalene Cotton (Kelly, 105 pounds)	0
Not Idle (Hitchcock, 115 pounds)	0
Index (Hill, 115 pounds)	0
Welcome (Cook, 105 pounds)	0
Applause (O'Brien, 115 pounds)	0
Al Farrow (Carrillo, 108 pounds)	0

Time—1:42 $\frac{3}{4}$.

RACE No. 29—RUNNING.

Free purse, two hundred and fifty dollars; of which fifty dollars to second. For non-winners at this meeting. Horses that have started and not run second allowed ten pounds. Winners of any race, entered herein, may be withdrawn without penalty. One mile and a sixteenth and repeat.

Name and Pedigree of Horse.	By Whom Entered	Address.
Elwood, ch. f. (4), by Norfolk; dam, Ballinette	Maltese Villa Stables	Merced.
Etta W, ch. m. (4), by Joe Hooker; dam, by Foster	A. Wakeman	Elk Grove.
Dave Douglas, b. g. (6), by Leinster; dam, Lily Simpson	G. W. Trahern	Stockton.
Hermes, b. s. (5), by Bayswater; dam, Herclade	L. A. Blasingame	Fresno.
Sid, br. c. (3), by Sidarthur; dam, Vestella	B. C. Holly	Vallejo.
Mart Gibson, ch. c. (3), by Joe Hooker; dam, Jennie Gibson	B. C. Holly	Vallejo.
Kildare, ch. g. (3), by imp. Kyrie Daly; dam, Mistake	T. G. Jones	Santa Rosa.

RACE No. 29—RUNNING—Continued.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Laura Gardner, ch. f. (4), by Jim Brown; dam, Avail	W. L. Appleby	Santa Clara.
Carmen, ch. f. (3), by Wildidle; dam, Nettie Brown	W. L. Appleby	Santa Clara.
Not Idle, ch. f. (4), by Wildidle; dam, Bonanza	M. T. Tarpey	Oakland.
Ledor, b. or br. g. (4), by Nathan Coombs; dam, Gypsy	Wm. Boots	Milpitas.

SUMMARY.

Laura Gardner (Hitchcock, 100 pounds)	1 1
Dave Douglas (Dennison, 110 pounds)	2 2
Mart Gibson (Richardson, 103 pounds)	dis.
Sid O'Day, 93 pounds)	dis.

Time—1:51; 1:53.

SATURDAY, SEPTEMBER 15, 1888.

RACE No. 30—TROTTING.

Free for all. Purse, one thousand five hundred dollars.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Lot Slocum, br. h., by Electioneer; dam, a Mohawk mare	A. Gonzales	San Francisco.
Arab, b. g., by Arthurton; dam, Lady Hamilton	O. A. Hickok	San Francisco.
Guy Wilkes, b. s., by Geo. Wilkes; dam, Bunker, by Mambrino Patchen	San Mateo Stock Farm	San Mateo.
Stamboul, b. s., by Sultan; dam, Fleetwing	L. J. Rose	Los Angeles.
Tempest, b. m., by Hawthorne; dam, by Chieftain	L. U. Shippee	Stockton.
Adair, b. g., by Electioneer; dam, Addie Lee	J. A. Dustin	Oakland.

NOTE.—Declared off on account of rain, under Rule 18, National Trotting Association.

RACE No. 31—TROTTING.

2:40 Class. Purse, one thousand dollars.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Perihelion, b. h., by Admiral; dam, Flora	W. S. Ray	San Francisco.
Jim Blaine, ch. g., by Oakland Boy; dam, by Flying Morrell	Raymond & Boucher	Porterville.
Ross S, b. h., by Nutwood; dam, by State of Maine	R. C. Sargent	Stockton.
Sonnet, b. f., by Bentonian; dam, Sontag Dixie, by Toronto Sontag	Palo Alto Stock Farm	Menlo Park.
The Dude, ch. g., by Gold Dust; dam, by Chieftain	J. R. Hodson	Sacramento.
Ben Ali, b. g., by Geo. M. Patchen, Jr.; dam, thoroughbred	J. A. Goldsmith	San Francisco.
Maggie E, br. m., by Nutwood; dam, by Geo. M. Patchen, Jr.	S. B. Emerson	Mountain View.
Stoneman, br. g., by Hambletonian; dam, by Reuben	C. F. Bunch	Ione.

NOTE.—Declared off on account of rain, under Rule 18, National Trotting Association.

RACE NO. 32—PACING.

Three-year old Class. Purse, three hundred dollars.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Adonis, b. h., by Sidney; dam, Venus	A. B. Gonzales	San Francisco.
Creole, blk. s., by Prompter; dam, Grace, by Buccaneer	T. C. Snider	Washington.
Yolo Maid, b. m., by Alex Button; dam, by Dietz's St. Clair	C. R. Hoppin	Yolo.
Wing Wing, b. m., by Privateer; dam, Mahaska Belle, by Flaxtail	Frank Hawkins	Woodland.
Gold Leaf, ch. f., by Sidney; dam, Fern Leaf ..	Pleasanton St'k Farm ..	Pleasanton.
Cricket, b. m.	J. A. Dustin	Oakland.

NOTE.—Declared off on account of rain, under Rule 18, National Trotting Association.

REPORT OF RACES.

BREEDER AND SPORTSMAN.

FIRST DAY.

The racing programme of the California State Fair opened at Sacramento on Thursday, September sixth. The city is unusually full of people, and the weather exceedingly hot.

The first race was the Occident Stake, for which there were but two starters: Redwood, by Anteeo, and Sol Wilkes, by Guy Wilkes. Both horses were quite lame.

SUMMARY.

CALIFORNIA STATE FAIR, SACRAMENTO, September 6, 1888.—Occident Stake; cash to winner, \$1,120.

A. McFadyen's b. s. Redwood, by Anteeo—Donathan	2	1	1	1
S. Solomon's b. s. Sol Wilkes, by Guy Wilkes—Brandow	1	2	2	2

Time—2:47; 2:39½; 2:36½; 2:40½.

The next race was for the 2:23 class, and resulted in heavy betting at big odds—Alfred S selling for \$50 against \$6 for the field of Valentine, Thapsin, and Gus Wilkes. Alfred S won the first and second heats, when pool selling stopped. In the third heat Valentine won, when the pools showed \$40 for Alfred S and \$10 for the field. The fourth heat was stubbornly contested, but Valentine won by half a length, Alfred S tiring and quitting badly. The last heat was an exciting one, Valentine breaking so badly at the quarter that his chance for the heat looked slim. Alfred S took the lead but was collared and passed by Wilkes, who led to the half. On the turn Alfred S quit and fell behind Thapsin. Valentine was, however, fast closing up the gap, created by his breaking, and at the head of the stretch had succeeded in reaching Wilkes and Thapsin—from here he came very fast, winning by five lengths. Gus Wilkes took second money, and Thapsin third money, while Alfred S was distanced.

SUMMARY.

CALIFORNIA STATE FAIR, SACRAMENTO, September 6, 1888.—Purse, \$1,200; 2:23 class.

J. H. Kelly's b. g. Valentine—Jones	4	4	1	1	1
E. H. Miller, Jr.'s blk. g. Thapsin—Smith	2	2	4	4	3
Mr. Ayers' b. s. Gus Wilkes—Dustin	3	3	3	3	2
H. W. Seale's b. g. Alfred S—McManus	1	1	2	2	dis.

Time—2:22; 2:21½; 2:24½; 2:24; 2:28½.

The chief interest of the day was in the pacing race for the 2:30 class. Gold Leaf was a great favorite, selling for \$25, Yolo Maid (her first appearance) at \$10, and the field of five—Cricket, San Diego, Ned Winslow, Elwood, and Little Doc—bringing \$13. Goldsmith was in the sulky behind the newcomer, Yolo Maid. He went off in the lead with Gold Leaf, and it was soon seen that she could outfoot the latter, and that the others could, also. The greatest applause greeted Yolo Maid when she passed under the wire the winner of the heat in 2:19.

The second heat was an easy win also for Yolo Maid, as she won as she pleased in 2:23½. Before the start for this heat Yolo Maid sold for \$100, field \$32, and Gold Leaf \$13.

The third heat was a wonderful exhibition of Gold Leaf's ability to stand punishment of the most severe kind. Never till the head of the stretch would she yield the lead to Yolo Maid, who had been lapped on her from the wire, but from here the Maid outfooted her, and came on and won the heat, race, and first money, in the fast time of 2:21¼; Gold Leaf third; San Diego second money; and Ned Winslow fourth money. Time, 2:21¼.

SUMMARY.

CALIFORNIA STATE FAIR, SACRAMENTO, September 6, 1888.—Pacing; purse \$600; 2:30 class.

C. R. Hoppin's b. m. Yolo Maid, by Alex Button—Goldsmith	1	1	1
H. C. Airhart's b. g. San Diego—Walsh	2	2	3
Pleasanton Stock Farm's s. m. Gold Leaf—McDowell	4	6	2
J. L. McCord's b. g. Ned Winslow—McCord	3	4	4
Hemett Stable's b. m. Elwood—Durfee	5	3	5
H. Meek's b. m. Cricket—Dustin	6	5	6
F. Seguin's b. g. Little Doc—Ober	7	7	7

Time—2:19; 2:23½; 2:21¼.

The winner, Yolo Maid, is the property of C. R. Hoppin, and is a half-sister to Rosie Mc, being by the same horse, Alex Button, out of a mare by Dietz's St. Clair. Her performance was wonderful, notwithstanding the fact that it has been beaten, and is the third time in an actual race that the world's record (2:22½) has been beaten in three weeks by California three-year olds, and while Gold Leaf holds the record (2:18), it is undisputed that in her first heat Yolo Maid could have knocked at least a second off it, as she actually jogged home in 2:19.

SECOND DAY.

While a majority of the races at the State Fair have proved to be of the best description, some of them can fairly be classed as exciting in the highest degree. Although on the opening day the Occident only brought out two starters, the 2:23 made amends, as the favorite Alfred S met with defeat when least expected, and not only was beaten but left behind the flag in the finishing heat. This may be attributed to the serious illness which overtook him at Stockton last year, or rather a return of the malady. The 2:30 pacing brought out another great three-year old to the credit of California, three of them winners in faster time than has been shown by the class heretofore, and the fourth evidently capable of beating any other record excepting the Pacific Coast mark. The first day was given last week, the second was a racing day, and as will be seen by the following account was a good beginning on the "legitimate," although the favorites made a clean sweep.

The first race was the Introduction Stake for two-year olds, a dash of three quarters of a mile. There were seven starters in the pools as follows: Don José \$70, Reward \$18, field \$10. After several attempts at a fair start Lady Helen led off, followed by Duke Spencer, with the favorite in the bunch close behind. As they swung into the stretch Don José cut loose from the crowd and soon had the leaders in trouble and both driving hard. He came away easily and won in a gallop, Lady Helen second and Duke Spencer third. Time, 1:17.

SUMMARY.

Theo. Winters' ch. c. Don José, by Joe Hooker-Countess Zeika—Holloway, 110.....	1
Thomas H. Williams' b. m. Lady Helen, by Norfolk-Jessie R—Hitchcock, 107.....	2
F. Depoister's b. c. Duke Spencer, by Duke of Norfolk-Lou Spencer—O'Neil, 110.....	3

Little Phil, Libertifibbet, Reward, and Futurity also ran.

Time—1:17.

The second race on the card was the California Breeders' Stake for the three-year olds, one mile and a quarter. Only three appeared, Peel selling for \$100, Snowdrop for \$16, and Carmen \$10. At the first attempt they got away, and on passing the stand the first time Peel was two lengths in the lead of Snowdrop, with Carmen several lengths back. The race from here needs no further description, more than to say the favorite increased his lead at will, and was ten lengths ahead of Snowdrop on the upper turn, when Courtney took a pull and finished easy two lengths ahead of Snowdrop. Time, 2:12½.

SUMMARY.

Palo Alto's b. c. Peel, by Monday-Precious—Courtney, 118.....	1
James Garland's ch. f. Snowdrop, by Joe Hooker-Laura Winston—Kelly, 115.....	2
Laurelwood Stable's ch. f. Carmen, by Wildidle-Nettie Brown—Appleby.....	3

Time—2:12½.

Betting—Auction pools: Peel \$50, Snowdrop \$8, field \$5.

The next on the programme was the Capital Stake, three-year olds and over, one mile and an eighth. In the pools the talent, with rare, good judgment, selected Brutus and Extract at even money, \$100 each, while the field went begging at \$35.

For ten minutes the horses were paraded in Indian file with their jockeys in colors, up in front of the Grand Stand, and this new rule of the Directors met with general approbation. It gave all an opportunity to learn their colors before the race. A beautiful start was given, and on reaching the stand for the first time Not Idle led Duke Spencer, with the others well up, and all under a heavy pull. They ran bunched around the turn, with these two still leading. Up the backstretch both Extract and Brutus moved into better positions, and both looked like winners as they came into the stretch. About midway in the straight, Brutus was seen coming fast on the inside and mowing the field down like grass, until at the drawgate he was running easily a length in the lead, Extract coming fast. She was on the outside, and was hardly seen in the crowd until the last few yards, when she came with a terrific rush, and, catching Slocum, the jockey on Brutus, napping, snatched the race by a nose at the very wire. Not Idle was third. Time, 1:58½.

SUMMARY.

Rancho Del Paso's br. f. Extract, by Virgil-Tincture, 3—Kelly, 105.....	1
Palo Alto's b. c. imp. Brutus, by McGregor-imp. Teardrop, 3—Slocum, 108.....	2
M. F. Tarpey's ch. f. Not Idle, by Wildidle-Bonanza, 4—Appleby, 115.....	3

Heliotrope, Hermes, Nancy, Del, and Nabeau ran unplaced.

Time—1:58½.

Betting—Auction pools: Imp. Brutus \$100, Extract \$60, field \$32.

The last race on the card was the free for all for a purse of \$250, heats of a mile, and brought out four starters that were held as follows in the pools: Canny Scot \$40 to \$22 50 before the first heat. This start proved a great failure for the starter, as he sent them off with Sid and Ledor standing still, and the other two, Canny Scot and Dave Douglas, running six

lengths away. Canny Scot at once took the lead and won the heat as he pleased. Dave Douglas second, and Sid and Ledor distanced. Time, 1:45½.

Canny Scot now sold for \$50 against \$8 for Douglas. Douglas led the way to the quarter, when Scot moved up, and after a brush on the backstretch was first to the half-mile pole. Around the upper turn Douglas again made play for the lead, and the sight as they ran was like one horse to the head of the stretch. Down the straight Canny out footed Dave and reached the wire first by a length, winning the heat and race. Time, 1:44½.

SUMMARY.

Oak Grove Stable's ch. g. Canny Scot, by Leinster-Tibbie Dunbar, 3—Holloway, 108 ..	1	1
G. A. Trahern's b. g. Dave Douglas, 6—Dennison, 115	2	2
Holly's Sid and Boot's Ledor		dis.

Time—1:45½; 1:44½.

Betting—Auction pools: First heat—Canny Scot \$40, field \$27 50. Second heat—Scot \$50, Douglas \$8.

THIRD DAY.

The third day was looked for with great interest in all parts of the State. Those who had the means and leisure to gratify their fondness for trotting sport resolved to witness the contests which were on the bill, and the great army compelled to stay at home anxiously awaited the reports, the first papers to contain them being seized with an eagerness which showed the anxiety felt. There was an immense crowd at the park, larger even than the most sanguine anticipated, and that they were well repaid, though the air was somewhat overheated, the accounts of the races will show. The first trotting race was a two-year-old stake, and four good youngsters put in an appearance. Two great fillies, none too high praise to award, Vesolia and Margaret S; and though Dame Fortune frowned on the handsome filly from Los Angeles in this race, she is well entitled to the rank. Fortuna is not far behind, and Kilrain has shown so well at home as to raise hopes that his time would come. Previous to the trotting match a race was run between Peregrine and Lida Ferguson, which was handily won by the colt of double paternity.

The first race was a match for \$500 a side between Peregrine and Lida Ferguson, five eighths of a mile. The betting before the start was \$50 on Peregrine against \$16 for Lida, and although this was big odds against a mare of such reputation for short races, the backers of Peregrine proved correct in their judgment, as the horse took the lead by a length soon after the flag fell and was never headed, although Lida closed with him at the head of the stretch, but was in trouble, her rider using every effort to urge her. The horse, however, shook her off on the straight, and won by two lengths. Time, 1:01½.

SUMMARY.

A. Wakeman's ch. c. Peregrine—Lloyd	1
H. Willitt's ch. m. Lida Ferguson—Cooper	2

Time—1:01½.

Betting—Auction pools: Peregrine \$60, Lida Ferguson \$16. The Paris mutuals paid \$6 30.

The two-year old trot was disastrous to the favorite. Before the start for the first heat Vesolia brought \$100 in the pools, Margaret S \$85, Fortuna and Kilrain coupled \$16. The scoring was tedious, which, without doubt, had an effect to rattle the favorite, and when the bell tapped to a fair send

off, unfortunately the clang had not stopped before Vesolia made a tangled break and fell ten lengths behind to the turn, where she made another and then a double break, and Margaret S reached the quarter first, two lengths ahead of Fortuna and ten ahead of Kilrain, with the favorite Vesola a distance out. Up the backstretch Donathan worked Fortuna up closer to Margaret S, while Kilrain was fast falling a distance behind, while Vesola, acting very badly, was clearly and hopelessly out.

Margaret S came on still in the lead of Fortuna and reached the wire first in time to have the flag drop in the faces of both Vesola and Kilrain, who had both run nearly half a mile in the vain hope of saving their distance. Time, 2:31 $\frac{1}{4}$.

Second Heat—Pools now sold, Margaret S \$45 and Fortuna \$4. Considerable delay was had in getting the horses to appear, and the judges, Messrs. La Rue, Green, and Singletary, imposed a fine of \$10 each on McDowell and Donathan. This had its effect on Margaret S and she answered the call, but Fortuna still failed to materialize and was fined \$10 more and given the alternative of appearing in two and a half minutes or getting fined \$25 for each subsequent length of time he failed. On the second trial they got away and Margaret at once took the lead, reaching the half in 1:14 $\frac{3}{4}$. From here Fortuna made a brush, but broke at the three-quarter pole and fell back ten lengths, Margaret S coming home leisurely, winning the heat and race, Fortuna second. Time, 2:31.

SUMMARY.

Pleasanton Stock Farm's b. f. Margaret S, by Director—May Day—McDowell	1	1
Z. E. Simmons' b. f. Fortuna, by Florida—George Wilkes mare—Donathan	2	2
L. J. Rose's b. f. Vesolia, by Stamboul—Inez—Maben	dis.	
L. U. Shippee's b. c. Kilrain, by Hawthorne—Hambletonian	dis.	

Time—2:31 $\frac{1}{4}$; 2:31.

The next event was—

THE GRAND STALLION STAKE.

There were two grand surprises previous to that of Saturday last, and in the whole history of trotting it would be difficult to find a parallel. When Stamboul beat Arab at Los Angeles, in 2:15, 2:17 $\frac{1}{2}$, 2:16 $\frac{3}{4}$, there was a thrill from San Diego to Siskiyou, and people who had any fancy for trotters were so much surprised that they could talk of nothing else. It was thought to settle the question of supremacy, and the stallion races at Oakland and Sacramento were considered already settled. Also, the National. Unless some accident befell Stamboul, the talk was that he would make a clean sweep all through. The second surprise came when Guy Wilkes disposed of the champion, although there was an element of luck in the victory, as it was argued that had Stamboul not made the break soon after the start for the first heat was given, he would surely have won, and this was too logical to be gainsaid. The third surprise was the greatest of all. Woodnut did not show to be within several seconds of either the others at Oakland, though there were a great many who thought that Holly had taken greater pains not to play his best trumps at that stage of the game than to win, and these sharp fellows will be doubly convinced of the correctness of their views now. There is scarcely a doubt that the Los Angeles track was the fastest of the three the day that Stamboul and Arab met, though inasmuch as Arab was driven two heats between those of the stallion race in 2:16 $\frac{1}{2}$, 2:16, the course at Sacramento could not have been far behind.

Every race has been a good one; from the standpoint excellent, as the falling off in the fourth and fifth heats at Oakland could be attributed to a lack of condition rather than to failure of stamina on the part of the contestants. This is further established by the time of the Sacramento race. It was to be expected that five heats, such as were trotted at Oakland, would better the condition of all engaged, provided the strain did not leave its mark in a wrong direction, and that subsequent work would be beneficial; and the following account proves this to be the case:

"When the call was made for the starting there was a marked excitement. Fans had been busily at work in the large assemblage, and their vibrating kept time to the music of the band. But when the horses came on the track there was such a desire to get a good look at the famous steeds that the fervor of the air was for a time forgotten, and each received an ovation as they passed in front of the stands. Pool selling was very lively. Thousands of dollars went into the box in a few minutes, and the backers of each were exceedingly eager to invest their cash. Guy Wilkes had settled into a pronounced favorite, bringing \$200, Stamboul \$160, Woodnut \$65.

"In the lottery for positions Woodnut got the pole, Stamboul second, and Guy Wilkes outside. On the fourth score they got the word, all going fast. Just as the bell tapped Woodnut broke and slightly interfered with Stamboul, who broke, and in turn drove Guy out, and he also broke, so at the first corner all three were in the air. Guy was the first to recover, and Woodnut the next, while Stamboul made a tangled break, similar to the one he had made in the first heat at Oakland, and Guy reached the quarter first in $0:34\frac{1}{2}$, four lengths in the lead of Woodnut and ten ahead of Stamboul.

"Up the backstretch Guy went fast, and reached the half in $1:10\frac{1}{4}$, having increased his lead on both the others around the turn. Woodnut moved up a little, and Goldsmith took Guy back on reaching the three-quarter pole in $1:47$, and eased him all the way down the straight, coming home without making an effort, Woodnut four lengths back, and Stamboul jogging in just inside the short distance. Time, $2:22\frac{1}{2}$."

Still hotter was the betting—a fight almost who should get the favorite—doubly so now at securing a first heat with so little exertion. If the backers of Guy were anxious to secure as many of the cards as their means would sanction, the supporters of Stamboul were also eager, and to \$200 on Guy they responded with \$130, while there were some quiet speculators ready to venture \$45 on Woodnut. Neither of the contestants looked a whit the worse for the heat, and the drivers were not at all dismayed, so far as could be told from their appearance. Goldsmith had the inveterate cigar between his teeth, and when he drove past the stand the first time it was at an angle which implied satisfaction with the outlook. Holly had a twinkle in his eye, and Walter's visage, though giving token of anxiety, was not the least downcast. After a couple of scores Goldsmith's cigar dropped to a lower angle, and as Woodnut came rattling along, the weed, though of the best brand, was discarded. Eight fruitless attempts; the ninth the word was given to a good start and the pace was rapid from the first.

At the quarter, $33\frac{3}{4}$ seconds, Stamboul, who had trotted very fast on the outside, led Wilkes by a length, he the same in front of Woodnut. Here Stamboul broke, but settled quickly, and half way up the stretch he broke again, and was passed by Woodnut. At the half, $1:07\frac{1}{2}$, Wilkes, who had been moving lively, led Woodnut by four lengths. Around the upper turn it was a procession, with Stamboul last. Turning into the stretch, Stamboul and Woodnut began to close on the leader, and at the rate of speed

he was coming it looked as though Stamboul would win, but the gap was too much for him to close. Not so with Woodnut, however, who kept coming, and challenged the leader at the drawgate, and after a very fine and exciting finish, which raised the spectators to a high pitch of enthusiasm, won the heat by a neck from Guy Wilkes, Stamboul third. Time, 2:16½.

There were renewed rounds of applause when the time was put on the blackboard, first and second given with only a quarter of a second between them. It proved that Woodnut had been contented to accept second place in the first heat, and when the cheering had subsided so that the voice of the auctioneer could be distinguished, the rates were: Guy Wilkes, \$200; Woodnut, \$110; Stamboul, \$45. When "Go!" rang out from the Judge's stand there was a slight difference, so slight that it was hard to tell that either had the advantage.

At the commencement of the curve Woodnut broke, and Guy showed half a length in the front. Around the turn Stamboul and Wilkes went lapped, but at the quarter, in 0:35½, Guy led by half a length. Up the backstretch it was a beautiful sight. Guy was just ahead of Woodnut, while on the other side was Stamboul.

At the half, in 1:07½, Stamboul was level with Wilkes, and Woodnut close up. On the turn Guy again showed to the front, while Holly seemed to be taking Woodnut back. At the three quarters, in 1:43, Woodnut had closed up the four lengths lost, and on the turn all three turned into the stretch together. At the seven eighths pole Stamboul was beaten, and the struggle was left to Woodnut and Wilkes, and a grand struggle it proved. At the short distance it looked like Wilkes' heat, barring an accident; but in the last twenty yards, as in the previous heat, Woodnut came up with a wonderful burst of speed, and collared him at the wire, making a dead heat, Stamboul a close third. Time, 2:17½.

Talk of Kentucky cheers when a "blue grass" horse beats a noted competitor from some other race-horse region; tell of the hurrahs of the dwellers on the Don when they rush into battle; the thousands which joined in the acclaim, as the horses came locked to the winning score, would have to be increased to increase the volume of sound. It rolled from beneath the overhanging eaves of the stand in a mighty torrent, and was met by the tumult from the dense mass below, uniting in a tidal wave, or rather a cyclone of cheers.

Notwithstanding Woodnut had shown manifest superiority in the very last strides of the two preceding heats, the supporters of Guy still clung to his chances, the rate being \$200 on him, \$150 on Woodnut, while Stamboul's stock appreciated till it reached \$65.

Several scores were necessary, as all three drivers were trying hard to get the best of it, if only by a nose. When the bell tapped it was to as good a send-off as could be had. At the eighth pole Woodnut made a revolution; but was in the lead at the quarter (0:35½) by half a length from Guy, with Stamboul three lengths back.

Up the backstretch to the three eighths pole the two leaders were head and head; but at this point Guy seemed to out-trot Woodnut, as he made several bounds in the air, and fell back at the half, which was trotted by Guy in 1:09¼, three lengths ahead, Stamboul either unable to get up, or again laying up the heat. On the upper turn Guy Wilkes had opened a gap of four lengths on Woodnut, and apparently had the heat well in hand; but Holly was only pursuing his tactics of the previous heats, and began to close at the three quarters, and about the drawgate again collared Wilkes, and, after a hard driving finish, in which the whip played a lively tune

on both horses, won the heat by a head amid the maniacal yells of the delighted assemblage and the short-end buyers. Stamboul was a close third. Time, 2:19½.

With the two heats to his credit, not to mention the dead heat, it could scarcely be otherwise than that Woodnut should be the favorite. The horse had shown qualities of the highest class; his driver had demonstrated as clearly as could be that he possessed all the qualities of a number one reinsman. The prices were: Woodnut, \$150; Guy, \$55; and Stamboul, \$6.

The fifth heat kept up the excitement to the last moment. They were sent off at the first score, Guy a head or short neck in the lead; this he did not retain, and Stamboul was the contending horse with Woodnut at the quarter in 0:34¼, a length in the lead. Stamboul made a bad break, however, and at the half, 1:10¾, Woodnut led Guy three lengths, Stamboul out of the race. Guy closed a part of the gap in coming around the turn, and he was close enough so that Holly could "carry him out" before coming into the stretch. Another grand struggle home, another game to Woodnut, which gave him the long rubber, as shown by the

SUMMARY.

CALIFORNIA STATE FAIR, SACRAMENTO, September 8, 1888.—Grand Stallion Stake of \$500 each; \$250 forfeit; \$1,500 added; six nominations.

B. C. Holly's ch. s. Woodnut, by Nutwood—Addie—Holly.....	2	1	0	1	1
Wm. Corbitt's b. s. Guy Wilkes, by Geo. Wilkes—Lady Dunn—Goldsmith..	1	2	0	2	2
L. J. Rose's b. s. Stamboul, by Sultan—Fleetwing—Maben.....	3	3	3	3	3

Time—2:22½; 2:16½; 2:17½; 2:19½; 2:21¾.

Sport enough for one afternoon surely, though still more was to come, and still another favorite destined to be slaughtered. This was the 2:30 class, and five of the entries appeared at the call of the judges. These were Franklin, Rosie Mc, Victor, Ha Ha, and Bonanza. Franklin was the favorite in the pools, notwithstanding Rosie beat him at Oakland, and this was corroborative of the suspicions which that race engendered. Even after the first heat, which Rosie won in the good time of 2:20¾, and which only requires a reference to the summary to understand, Franklin brought \$60 to \$40 on the mare, the field \$18.

The second heat was more interesting. It was a very good start, and the mare soon took a slight lead. At the quarter it was very close between Rosie and Franklin. The others strung out behind. Half way up the stretch Franklin broke, and at the half the mare led Franklin by five lengths. Around the upper turn, Victor was coming up fast and began to look dangerous, but the mare had some left and won the heat easily, Victor second, Franklin third, and Ha Ha last. Time, 2:23¼.

Rosie Mc now became an immense favorite, bringing \$200 against \$21 for the field. This heat proved a surprise to the talent. Sent away at the first attempt, Victor broke soon after leaving the score, but settled quickly. Rosie Mc also broke now, and Victor was first at the quarter by a length from Franklin. Up the backstretch it was a procession, Victor leading by two lengths at the half. Around the upper turn Franklin closed up, and at the three quarters it was close. Victor broke soon after heading into the stretch, but came again, and, by carrying Franklin to a break at the draw-gate, won the heat by five lengths, Franklin second, Goldsmith saving Rosie Mc, when he found he could not win the heat, third, and Ha Ha fourth. Time, 2:23½.

During the scoring for the fourth heat, the drivers persisted in coming up in opposition to the directions of the judges, and causing many false starts, until Judge La Rue fined Goldsmith and Donathan \$10 each. This

proved effective, and the second attempt after the infliction of the fines, they were sent off to fair start with Ha Ha, who persisted in not coming up, left at the wire. Franklin rushed off with the lead, but was fastened on to by Rosie Mc at the quarter pole, and as he broke just before reaching the half she took the lead, and trotting easily, came on home, winning the heat, race, and first money by four lengths from Franklin, who got third money. Victor was third, and got second money. Time, 2:25.

SUMMARY.

J. A. Goldsmith's b. m. Rosie Mc, by Alex Button-Rosedale—Goldsmith ..	1	1	4	1
G. A. Doherty's br. s. Victor, by Echo-Woodburn—Walsh	3	2	1	2
Charles Davis' br. g. Franklin—Donathan	2	3	2	3
Houser & Soule's br. s. Ha Ha—Soule	4	4	3	4
R. Havey's s. s. Bonanza—Havey	dis.			

Time—2:20 $\frac{3}{4}$; 2:23 $\frac{1}{4}$; 2:23 $\frac{1}{2}$; 2:25.

FOURTH DAY.

Monday was the second racing day, and those who grumbled over the sport of the afternoon could only be incited by losses which were larger than the pleasure returned. The sun glowed with rather too much fervor, and the air, heated to a glowing red, did its part in sweating biped and quadruped; nevertheless by far the largest attendance ever witnessed on a Monday of Fair week was present. Estimates ran as high as twelve thousand, and none of the expert estimators placed it lower than ten thousand. The first race on the card was the Premium Stake, so named after a fast mare which won it a few years ago. It is a sort of compromise between short stock and those with extended genealogies, though the blue-bloods have had the best of it as a rule.

High betting. The highest of the high rollers appear to prefer these short dashes for an investment, and this was not an exception. When "sold out" the rank was Peregrine \$100, Sleepy Dick \$48, Extract \$48, Daisy D \$28, Idalene Cotton \$20, Edelweiss \$24, Al Farrow \$20, Applause \$16, Not Idle \$12, Welcome \$8. Too cumbersome, however, too many tickets to write, too much time wasted, so that the regular business settled at the course to \$60 on Peregrine, Sleepy Dick \$38, Extract \$20, all the others massed in the field \$50.

With so large a field it was to be expected that some trouble would be had in getting a good start, Al Farrow going so far as to jump over the inside fence with all the vim of a veteran steeplechaser, but when the flags fell it was to a very fair start. Difficult to say which had the best of it: impossible in the jumble of horses and colors to place the leaders as they dashed along the backstretch and swept around the turn. Coming home it was seen that Daisy D had an advantage, and this she maintained to the wire, though not far behind came Not Idle second, and Applause third.

SUMMARY.

CALIFORNIA STATE FAIR, SACRAMENTO, September 10, 1888.—Premium Stake; \$350 added; \$100 to second, third to save stake. Three quarters of a mile.

B. Cockrill's b. m. Daisy D, by Wheatly-Black Maria, 6—Hennessy, 115	1
M. F. Tarpey's s. m. Not Idle, 4—Hitchcock, 115	2
T. G. Jones' b. g. Applause, 4—Ross, 115	3
Peregrine, Idalene Cotton, Al Farrow, Edelweiss, Welcome, Extract, and Sleepy Dick ran unplaced.	

Time—1:14 $\frac{3}{4}$.

Betting—Auction pools: Peregrine \$60, field \$50, Sleepy Dick \$38, Extract \$20. Paris mutuels paid, straight, \$12 95; place, \$32 50.

The short end had gained the first game, and those who had backed Daisy D for a place made a clear profit of \$27 50 for \$5 invested. This stimulated betting in the next race, the California Annual Stake, for foals of 1886, one mile. There were three starters, Picnic, Don José, and Almont. Don José was a large favorite in the pools, bringing \$200 to \$65 for Almont and \$50 for Picnic. And heaps of coin and bundles of notes went into the *pro tempore* bank, the pool box.

The horses had a good send off. Almont led to the quarter, Don José a length behind and a length in the rear of Picnic. At the three eighths pole Don José began to crawl up and soon took second place from Picnic. At the three quarters Don José came alongside of Almont, but the Three Cheers colt was too speedy for the Joe Hooker, and he won by a length in the fast time of 1:42 $\frac{3}{4}$, Don José second, Picnic third.

SUMMARY.

CALIFORNIA STATE FAIR, SACRAMENTO, September 10, 1888.—California Annual Stake, for foals of 1886; \$100 entrance; \$25 forfeit; twenty-seven entries and three starters; \$250 added.

W. M. Murry's b. c. Almont, by Three Cheers—Question, 2—Lloyd, 110.....	1
Theo. Winters' ch. c. Don José, 2—Holloway, 110.....	2
L. U. Shippee's b. f. Picnic, 2—Courtney, 107.....	3

Time—1:42 $\frac{3}{4}$.

Betting—Auction pools: Don José \$140, Almont \$50, Picnic \$25. Paris mutuals paid, straight, \$25 60.

Jubilant the short-enders, gloomy the faces of those who pin their faith on favorites, and some of the biggest losers were fain to use higher stimulants to raise their spirits, and whatever it was the effects were visible in the plunge to get even on the La Rue. Not so pronounced a favorite as Don José, yet Laura Gardner had the call, backers apparently losing sight of the hard races ran since the opening of the Los Angeles Fair. Canny Scot pressed her for pride of place and that he should have been awarded still stronger support was not only justified by the outcome, but prognosticated by his race at the spring meeting, and recovery of form as shown in the race of Friday.

Six more placed in charge of the starter and sold in the pools as follows: Laura Gardner \$70, Canny Scot \$65, the field of Dave Douglas, Leon, Hermes, and Index, \$100. This was a beautiful race. On the fall of the flag to a splendid start the horses ran to the stand the first time, with Leon first, followed by Hermes, Laura Gardner, Index, Canny Scot, and Douglas, in the order named. The positions were changed at different posts, with the exception of Leon, who still led at the end of the mile and a quarter, with Gardner second and close up, Index third, Hermes fourth, Canny Scot fifth, and Dave Douglas last. Leon held the lead to the mile and three quarters post, where he was challenged for the lead by Laura Gardner, and the two lapped around the turn and into the stretch. Then Index moved up; Canny Scot bettered his position, and coming very fast was soon in the lead, and came away and won as he pleased by two lengths, amid the loud yells and cheers of the short-end buyers, who again won big money with little risk. Index was second, Laura Gardner third, Hermes fourth, Leon fifth, and Dave Douglas sixth. Time, 4:02.

SUMMARY.

CALIFORNIA STATE FAIR, SACRAMENTO, September 10, 1888.—The La Rue Stake, a handicap for all ages; entrance, \$100; \$50 dollars forfeit; with \$500 added, of which \$150 to second horse, \$100 to third; dash of two and one quarter miles. There were nine nominations and six starters.

Oak Grove Stables ch. c. Canny Scot, by Leinster-Tibbie Dunbar, 3—Cook, 104.....	1
William Boots' blk. g. Index, by Thad Stevens-Gypsy, 6—Hart, 115.....	2
W. L. Appleby's s. m. Laura Gardner, by Jim Brown-Avail, 4—Howson, 115.....	3
Dave Douglas, Leon, and Hermes ran unplaced.	

Time—4:02.

Betting—Auction pools: Laura Gardner \$70, Canny Scot \$65, field \$100. Paris mutuals aid, straight, \$22 25; place, \$10 75.

The closing race of the day was a selling purse of \$300 for all ages, and the prices fixed apportioned the weights as they are given in the summary. Six horses faced the flag, and rated in the pools as follows: Elwood \$50, Nerva \$22 50, and the field, Blackstone, Oro, Fusilade's Last, and Wild Oats, at \$37 50. Fusilade's Last cut out the running and led to the half mile post, closely followed by Elwood under a strong pull, with Oro next and the others well bunched. At the three-quarter pole Elwood showed in front, with Wild Oats and Nerva red hot after him. Down the straight he came fast and true, and increased his lead to the wire three lengths, Oro second, and Nerva third. *Time*, 1:51.

SUMMARY.

CALIFORNIA STATE FAIR, SACRAMENTO, September 10, 1888.—Selling purse, \$300; for all ages; one and a sixteenth miles.

R. Porter Ashe's ch. g. Elwood, by Norfolk-Ballinette, 4—Cook, 115.....	1
Owen Bros.' b. s. Oro, 4—Howson, 118.....	2
William Boots' ch. m. Nerva, 5—Hart, 115.....	3
Blackstone, Fusilade's Last, and Wild Oats ran unplaced.	

Time—1:51.

Betting—Auction pools: Elwood \$50, Nerva \$32 50, field \$37 50. Paris mutuals paid, straight, \$15 25; place, \$8 40.

FIFTH DAY.

Tuesday was one of the trotting days which rarely occur, that being three races with "probable winners" nearly beyond the range of probability taking place in the ranks which are made up of certainties, and without a "broken heat" to relieve the monotony.

Despite the thermometer—nearly 102 in the shade, ever so much hotter in the sun—and a poor prospect for anything like contests, there was a good attendance.

The first race was a stake for three-year olds, and the always victorious Grandee was the favorite at \$50, to \$10 on Direct, and \$3 on Balkan and Moses S coupled. Direct was manifestly out of order, and all that is necessary is to give the placing and time, as follows:

SUMMARY.

CALIFORNIA STATE FAIR, SACRAMENTO, September 11, 1888.—Three-year old stake; mile heats, best three in five.

Wm. Corbitt's b. g. Grandee, by Le Grand-Norma, by Arthurton—Goldsmith.....	1	1	1
Irving Ayres' br. c. Balkan, by Mambrino Wilkes-Fanny Fern—Hinds.....	2	2	3
Pleasanton Stock Farm's blk. c. Direct, by Director-Echora—McDowell.....	4	3	2
L. U. Shippee's b. c. Moses S, by Hawthorne-by Cramer's Black Hawk—Whiting.....	3	4	4

Time—2:30; 2:28½; 2:29.

The 2:20 race, with Woodnut in it, could only be a question of accident if he were defeated. Two good ones against him at that, but after his grand victory in The Grand what was to get near him? Holly kept him in their company, however, and those who were not aware that the contiguity was on sufferance were gratified with quite a pretty race.

SUMMARY.

CALIFORNIA STATE FAIR, SACRAMENTO, September 11, 1888.—Purse, \$1,200; 2:20 class; mile heats, best three in five.

B. C. Holly's ch. s. Woodnut—Holly	1	1	1
N. Coombs' b. m. Lillie Stanley—Hickok	2	2	3
M. Salisbury's b. s. Mount Vernon—McDowell	3	3	2

Time—2:22½; 2:22½; 2:22¾.

The 2:30 was just as great a moral certainty for Maggie E as the others had been for Grandee and Woodnut. Pools sold on second place, and for that Whipple was the favorite at \$20, Ross S and Perihelion bringing \$6 each. The first heat Maggie E at once took the lead, followed by Whipple, with Ross third and Perihelion last. These positions were maintained from start to finish, Maggie jogging home an easy winner of the heat. Time, 2:26¾. In the second heat on the third attempt they got the word, and on the turn Whipple assumed the lead, with Perihelion second and Maggie third, about ten lengths back. Whipple held the lead to the head of the stretch, where Maggie began to close up, and down the stretch she came away and won as she pleased; Whipple second, Perihelion third, Ross fourth. Time, 2:23. In the last heat Maggie E at once opened a big gap, and in trying to close it Whipple made a stand-still break and fell a distance out. Down the stretch, however, Donathan slowed the mare up and allowed him to save both his distance, second money, and the place bets. Perihelion was second, and Ross S last. Time, 2:30.

SUMMARY.

CALIFORNIA STATE FAIR, SACRAMENTO, September 11, 1888.—Purse, \$1,000; 2:30 class; mile heats, three in five.

Maggie E, b. m.—Donathan	1	1	1
Steve Whipple, b. s.—Parker	2	2	3
Perihelion, b. s.—McDowell	4	3	2
Ross S, b. s.—Ober	3	4	4

Time—2:26½; 2:23; 2:30.

SIXTH DAY.

The weather on Wednesday was a great improvement on that of former days. It may have been that the time-honored clerk, who is popularly supposed to apportion hot and cold, wet and dry, accordingly, as he wills, has a fondness for racing, and led him to favor the third day of the gallopers. None the less grateful were the recipients—those with trotting inclinations hoping that the same courtesy would be extended to the harness division when their innings were called.

Four races to be decided, and, as will be learned from the report, capital races they proved to be. Speculation was brisk on all of them, in some the betting was heavy.

The first was the Sunny Slope Stake, a dash of five eighths of a mile, for two-year old fillies. The horses that had started and not won first or second place in any race this year were allowed five pounds.

The starters were Bessie Shannon, Picnic, and Libertifibbet of Shippee's stables, Palo Alto's Faustine, and Appleby's Futurity, by John A. Although Haggin had three horses in the nominations, none of them started. In the pools, Shippee's stable was the choice at \$50, Faustine selling nearly even, and the field at 13. The betting was very lively, and the auctioneers were kept busy until the very moment the word was given.

Bessie Shannon cut out the pace to the three quarters, with Futurity second. At the seven eighths the horses were well bunched, but at this point the Palo Alto filly left the crowd, and Picnic followed after. Down the stretch it was impossible to tell which of the two was ahead, and the crowd cheered the game efforts of the plucky colts. About one hundred yards from the wire Faustine pulled away and won by a short length, after a very fine finish, Picnic second, and Bessie Shannon third. Time, 1:02 $\frac{1}{4}$.

SUMMARY.

CALIFORNIA STATE FAIR, SACRAMENTO, September 12, 1888.—Sunny Slope Stake, five eighths of a mile, for two-year olds.

Palo Alto's b. f. Faustine, by Flood-imp. Flirt, 2—Hitchcock, 107.....	1
L. U. Shippee's br. f. Picnic, by imp. Mr. Pickwick-imp. Countess, 2—Hart, 102.....	2
J. Reavey & Co.'s b. f. Bessie Shannon, by Shannon-Bettie Bishop, 2—Lloyd, 107.....	3
Libertiffibbet and Futurity ran unplaced.	

Time—1:02 $\frac{1}{4}$.

The "big betters" usually fancy favorites. In fact, the amount of money to be put on is what gives the premiership. Therefore, this class were ready to throw in their winnings at a lively rate when they had settled that the McGregor colt should hold the position.

The Shafter Stake, a dash of one mile and a quarter, for three-year olds, was the second event of the programme. The horses that had won in races this year carried five pounds extra.

There were nine nominations. A rush was made for the poolbox before the race, and excited bidding sent Palo Alto's McGregor colt up to \$120, \$75 for Haggin's Extract, and \$30 for the field, in which were the Los Angeles stable's Del, William Boot's Ledor and Nabeau, and Mrs. Wolfskill's Joe Hooker filly. Heliotrope.

Ledor behaved badly, and persisted in taking the bit in his teeth and having things his own way, so that a dozen attempts were made before the horses got away. When, finally, starter Crittenden dropped the flag, all the horses had an even chance. Ledor led at the start, and began at once to gratify his propensity for running, as shown so unpleasantly before the start. Haggin's filly kept close to him, and at the quarter the handsome McGregor colt swept past both them. Brutus never lost his advantage, and won easily from Heliotrope, Extract third, and the others not placed. Time, 2:11.

SUMMARY.

CALIFORNIA STATE FAIR, SACRAMENTO, September 12, 1888.—Shafter Stake, for three-year olds, one and a quarter miles.

Palo Alto Stock Farm's b. c. imp. Brutus, by McGregor-imp. Teardrop, 3—Courtney, 113. 1	1
Mrs. S. B. Wolfskill's b. m. Heliotrope, by Joe Hooker-Yolone, 3—Carrillo, 115.....	2
J. B. Haggin's br. f. Extract, by Virgil-Tincture, 3—Kelly, 115.....	3
Del, Nabeau, and Ledor ran unplaced.	

Time—2:11.

Betting—Auction pools: Brutus \$80, Extract \$60, field \$20. Paris mutuals paid \$8 35.

So far backing the favorite had been a profitable investment, and when Peregrine was installed as dux in his class there was a rush to secure him at nearly twice as much as all the others brought. His victory over Lida Ferguson in fast time for the distance, five furlongs, was an augury that the added furlong would not stop him. Still, there were many who felt confident that Not Idle would make a good return, and stood by her with confidence.

The race is called the Del Paso Stake, for all ages; three-year olds to carry one hundred pounds, four years one hundred and ten, five years and upward one hundred and twelve; three quarters of a mile.

There were twelve nominations, but only five starters: Porter Ashe's Elwood, Jack Brady, Peregrine, Blue Bonnet, and Not Idle. The betting was very heavy, with Peregrine the favorite at \$70, to \$35 for Not Idle, and \$13 for the field.

There was a good start. Not Idle pushed ahead and held the lead to the half, and was there overtaken by the favorite, Elwood only a length behind. It was a pretty race to the seven eighths, where Peregrine, by sheer force of superior speed, passed Not Idle. This seemed to discourage her and she slackened her speed, giving the heat to Peregrine, Not Idle second, Elwood third. Time, 1:15.

It was the belief of everybody that Peregrine's advantage of ten pounds in weight insured him the race, and before the second heat he sold for \$50 to \$12 for the field, and his backers did not stake more on him only because they had no time before the second heat was called. The talent went in heavily on the favorite, and when they could get no more bets in the pool-box they went about bantering for wagers among the crowd.

It was nearly half an hour before Crittenden could bring the horses up for a square start. When at last he succeeded Not Idle went forward like a shot, Blue Bonnet and Jack Brady working together close at her heels. Elwood was a good third, and the favorite dismayed his friends by lagging along two open lengths behind, but the fine little gelding was only resting, for at the half he had overhauled all but Not Idle and got within one length of her. That was all he could do, however, for, although he struggled gallantly and ran true as a line, Not Idle beat him in; Peregrine second. Time, 1:15½.

For the third heat only Not Idle and Peregrine could start, the other horses being excluded under the rules. The talent saw their mistake in pinning their faith to Peregrine, and there was a rush to buy Not Idle, and \$75 was offered for her to \$55 for Peregrine.

On the start the latter took a short lead, followed closely by Not Idle, but at the half Not Idle had closed the gap, and then for a quarter of a mile it was a splendid contest, the horses running so evenly that no one could see a shade's difference in their noses. On the turn the three-year old gave up, and Not Idle found it easy to win in 1:16 by half a dozen lengths, which the vigorous use of the whip did not help Peregrine to reduce. This heat finished the finest running race of the Fair thus far, and Not Idle received warm plaudits for her famous victory.

SUMMARY.

CALIFORNIA STATE FAIR, SACRAMENTO, September 12, 1888.—Del Paso Stake; heats of three quarters of a mile.

M. F. Tarpey's ch. f. Not Idle, by Wildidle-Bonanza, 4—Hitchcock, 109..... 2 1 1
W. M. Murry's ch. g. Peregrine, by Joe Hooker-Irene Harding, 3—Lloyd, 110..... 1 2 2
Elwood, Jack Brady and Blue Bonnet ran unplaced.

Time—1:15; 1:15½; 1:16.

Betting—Auction pools: First heat—Peregrine \$50, Not Idle \$37, field \$15. Second heat—Peregrine \$50, field \$12. Third heat—Not Idle \$60, Peregrine \$32 50. Paris pools paid: Not Idle, straight, \$14 25; place, \$5 50.

Two for the favorites and one for the second choice was the ruling for the day so far, and now the turn of the field was to come. Such a big inclosure, however, that seven of the nine starters were within its bounds, though the two not included were held worth more than the success.

The last race was a free purse. Horses that have started and not won at this meeting allowed ten pounds, while winners, carrying rule weights, were required to carry five pounds extra.

Out of the seventeen nominations nine started: Edelweiss, Ashe's Idalene Cotton, Haidee, J M R, Fusilade's Last, Wild Oats, Oro, Al Farrow, and Nerva. Idalene Cotton brought \$40 in the pools against \$60 for the field and \$32 for Al Farrow. At the first quarter Edelweiss was ahead, with Idalene Cotton second. The horses held this position all the way around, Edelweiss winning, Idalene Cotton second, and Haidee third. Time, 1:43 $\frac{1}{4}$.

SUMMARY.

CALIFORNIA STATE FAIR, SACRAMENTO, September 12, 1888.—Free purse, \$300; one mile; for all ages.

Mrs. S. B. Wolfskill's br. m. Edelweiss—Hazlett	1
R. P. Ashe's b. f. Idalene Cotton—Kelly	2
D. Dennison's b. f. Haidee—Dennison	3

Oro, Fusilade's Last, Al Farrow, Spray, Nerva, J M R, and Wild Oats ran unplaced.

Time—1:43 $\frac{1}{4}$.

SEVENTH DAY.

There have been so many grand events in connection with the State Fair that the repetition of the adjections may appear tiresome, but to pass over the grand weather of Thursday would be an omission not justifiable from any point of view. The "heated spell broke," and if it had run short a couple of weeks ago there would have been delight at the misfortune. The attendance was good and the track in fine condition.

In the first race, a special free purse, seven eighths of a mile and repeat, there were three entries. Kildare was a strong favorite, but was pulled to Blue Bonnet, who took the lead and was never headed, with Kildare a length back, and his mouth wide open and his head nearly pulled off. Oro was third. Time, 1:30 $\frac{3}{4}$. The judges very justly dismounted Cook, the rider of Kildare, and put up Hitchcock. The pools now sold Kildare \$30, Blue Bonnet \$12, and Oro \$8.

In the second heat Kildare went off at once in the lead and was never headed, and under Hitchcock's riding won the heat easily from Blue Bonnet by two lengths, Oro third. Time, 1:30.

Blue Bonnet made a runaway heat and took the lead from the first hundred yards, and finished an easy winner of the heat and race by two lengths. Time, 1:32 $\frac{3}{4}$.

The 2:25 brought out eight very good horses, but the somewhat sensational stallion Victor so far outranked the others that the greatest interest was centered in him. In the pools Victor brought \$120, Don Tomas \$60, and the field \$40. A good send off was had on the fourth trial and Don Tomas was first to the quarter, two lengths ahead of Victor, with the others in a bunch. These positions were unchanged until the head of the stretch, when Victor took the lead with all the ease imaginable and won the heat by five lengths from Don Tomas, amid the wildest excitement and yelling. The others finished as per summary. Time, 2:25 $\frac{1}{2}$.

The second and third heats were taken by Victor with the greatest ease, distancing Artist in the second and Ha Ha in the third heat, and the band playing "One More River to Cross." Time, 2:22 $\frac{1}{2}$ and 2:24 $\frac{1}{2}$.

SUMMARY.

CALIFORNIA STATE FAIR, SACRAMENTO, September 13, 1888.—2:25 class, for a purse of \$1,000. Mile heats, three in five.

G. A. Doherty's br. s. Victor, by Echo; dam by Woodburn—Doherty	1	1	1
C. L. Durfee's blk. g. Don Tomas—Durfee	2	3	2
A. C. Davenport's br. s. Allo—Dustin	3	4	3
S. C. Tryon's ch. m. Eva W—McConnell	5	2	4
I. Ayres' b. h. Alpheus—Hinds	6	5	5
Houser & Soule's br. s. Ha Ha—Houser	4	6	dis.
J. R. Hodson's blk. g. Artist—Shaner	7	dis.	
F. B. Glenn's blk. g. John R—Johnson	dis.		

Time—2:25½; 2:22½; 2:24½.

The four-year old trot was the next race on the programme, and was for the four-year old trotting stakes. The only nominations to appear were Dubec and Moses S, and the race proved an easy one for Dubec, as he won in three straight heats. Time, 2:28½, 2:29¾, 2:34½.

SUMMARY.

CALIFORNIA STATE FAIR, SACRAMENTO, September 13, 1888.—Four-year old trotting stake. Mile heats, best three in five.

L. J. Rose's b. g. Dubec, by Sultan—Maben	1	1	1
L. U. Shippee's b. c. Moses S—Whiting	2	2	2

Time—2:28½; 2:29¾; 2:34½.

The free for all pace was called so late in the afternoon that only two heats could be paced. The first was won by San Diego in 2:24, and the second by Almont Patchen in the same time, when it was postponed until Friday at noon. Almont Patchen was a big favorite, bringing \$50 to \$24 on all others.

EIGHTH DAY.

Friday, the fourteenth, turned out to be the last day of the Fair, and to be in keeping with nearly every day which preceded it, was chock full of sport. Still more pleasant the weather, notwithstanding there was a down-pour, with the usual concomitant in this part of California of thunder and lightning, soon after the horses were called.

There had been a light shower in the forenoon, but not enough to dampen the ardor of the people, so that when the hour came for the ladies' tournament, 10 A. M., the stands were crowded. At least five thousand were in attendance, and they were well repaid, as the equestriennes acquitted themselves admirably. All won hearty plaudits, and the Judges were hugely puzzled to award the premiums, which, after long consultation, were distributed as follows:

The Judges awarded the first prize of \$70 to Miss McGrath; Miss Elliott, second prize of \$55; Winnie Clark, third prize of \$40; Belle Hewitt, fourth prize, \$35; Mrs. Trefry, fifth prize, \$30; and Mrs. Paquin, sixth prize, \$25.

The rain had diminished the fast qualities of the track somewhat, and when the horses for the unfinished pacing race were brought out the shower of the morning was supplemented by what could be called a plentiful dispensation of the unwelcome drops. Almont Patchen still held his position of favorite, and though Belmont Boy pressed him closely, leading to the three quarters pole, when the favorite passed him, and won with a fair degree of handiness.

SUMMARY.

CALIFORNIA STATE FAIR, SACRAMENTO, September 13 and 14, 1888.—Pacing purse, \$800; free for all.

W. M. Billup's br. s. Almont Patchen, by Juanita; dam, Gladys, by Gladiator—Sullivan.....	4	1	1	1
H. C. Airhart's b. g. San Diego, by Victor; dam, thoroughbred—Walsh.....	1	3	4	3
G. S. Roberts' ch. g. Belmont Boy, by Nutwood; dam, Lady Vernon—Bayless.....	2	2	2	2
J. L. McCord's blk. g. Ned Winslow, by Tom Benton; dam, by Dave Hill, Jr.—McCord.....	3	4	3	4
S. C. Tryon's ch. m. Pocahontas, by Washington; dam, by George—McConnell.....	7	6	5	5
J. R. Hodson's b. g. Bracelet, by Nephew; dam, Mambrino, by Creighton—Donathan.....	5	5	dis.	
L. E. Clawson's ch. g. Damiana, by Admiral—McDowell.....	6	dis.		

Time—2:21; 2:21; 2:22; 2:22½.

Third and fourth heats paced September fourteenth.

The racing was now in order, and the California Derby was the first on the programme. It is a stake for three-year olds, of \$100 each, \$50 forfeit, declaration \$10, January 1, 1887; \$15, January 1, 1888; \$25, May 1, 1888; the distance of one and one half miles. There were twenty-nine nominations, four of which started, viz: Palo Alto's Peel, by Monday, from Precious; Canny Scot, by Leinster, from Tibbie Dunbar; Leon, by Leinster, from Addie A; and Snowdrop, by Joe Hooker, from Laura Winston. This was a quartet of well bred ones, but the prestige of the Palo Alto stable installed Peel in the first place in the pools, and he brought more than all the others. The track was necessarily slow from the rainfall, though safe, and when the flag fell to a good start Leon went to the front and led for nearly a mile, Peel second, Snowdrop third, Canny Scot contented to bring up the rear. Soon after passing the starting point Leon gave up, falling back of all the others, and Peel came into the stretch with the lead, but not so far in front as to settle the dispute without further argument. The run down the home-stretch was exciting. The jockeys were all doing their best, and when the colts went under the wire Peel was half a length in the lead of Snowdrop, Canny Scot close up. Considering the condition of the track the time was fast, 2:38¼.

SUMMARY.

CALIFORNIA STATE FAIR, SACRAMENTO, September 14, 1888.—The California Derby Stake, for foals of 1885. Closed in 1886 with twenty-nine nominations. \$300 added. One and one half miles.

Palo Alto's b. c. Peel, by Monday—Precious, by Lever, 3—Courtney, 118.....	1
James Garland's s. m. Snowdrop, by Joe Hooker—Laura Winston, 3—Kelly, 115.....	2
W. L. Pritchard's ch. c. Canny Scot, by Leinster—Tibbie Dunbar, 3—Holloway, 118....	3
F. P. Lowell's b. s. Leon, by Leinster—Addie A, 3—Bally, 118.....	4

Time—2:38¼.

Betting—Auction pools: Peel \$50, Canny Scot \$16, field \$20.

The second race was for the Palo Alto Stake, handicap, a dash of a mile for two-year olds, and of the twenty-one nominations seven started. These were: The Czar, by Norfolk, from Marian; Shannon Rose, by Shannon, from imported Fairy Rose; Duke Spencer, by Duke of Norfolk, from Lou Spencer; Reward, by Jim Brown, from Trophy; Futurity, by John A, from Ella Doane; Wild Oats, by Wildidle, from Mary Givens; and Naicho B, by Wanderer, from Flower Girl. "Own" brother to the Emperor of Norfolk, it was to be expected that The Czar would have the pride of place with the betters, and better than near relationship was the possession of speed in his own right. But the prevailing influenza got hold of him on two occasions and he had not time to fully recover from its inroads. He sold in the pools for \$100, Shannon Rose \$70, all the others combined \$40. Two-

year olds are generally a source of trouble to the starter, and this was not an exception, though a fair send-off was given, making amends for the loss of time. Shannon Rose bounced off with the lead, and at the quarter there was a short gap between her and Futurity, Wild Oats third. At the half The Czar moved into the first place with apparent ease, and rounded the further turn at the head of the procession. Wild Oats came fast down the stretch, faster than the rider of The Czar seemed to realize, and came very near "catching him on the post." A bare nose was all the favorite won by, and that amid a unison of cheers from the backers of both ends. The time, 1:44. Shannon Rose two lengths behind Wild Oats.

SUMMARY.

CALIFORNIA STATE FAIR, SACRAMENTO, September 14, 1888.—The Palo Alto Stake, a handicap for two-year olds: \$50 entrance; \$25 forfeit; \$10 declaration; \$100 added, of which \$100 to second; third to save stake. One mile.

Theodore Winters' b. c. The Czar, by Norfolk-Marian, by Malcolm—Carrillo, 110	1
W. L. Appleby's b. c. Wild Oats, by Wildidle—Mary Givens—Hitchcock, 95	2
Palo Alto's b. f. Shannon Rose, by Shannon—imp. Fairy Rose, by Kismet—Tompkins, 107	3
Duke Spencer, Reward, Futurity, and Naicho B ran unplaced.	

Time—1:44.

If the backers of the favorite got a scare in the two-year old race, there was utter demoralization in the Golden Gate Stake for three-year olds, one and three quarter miles; and of eight nominations three appeared. These were Palo Alto's imported colt Brutus, by McGregor, from imported Tear-drop; Moses B, by Leinster, from Aunt Jane, named by M. S. Bryan, and William Boots' Nabeau, by Nathan Coombs, from Beauty. Brutus was the biggest kind of a favorite. Those who saw him beaten by Extract ascribed the defeat to the rider and with better reasons for so awarding it than generally is the case. Those who pin their faith on genealogy and who had an acquaintance with the big guns of the English turf, knew that his sire was one of the very fastest of his day, and his dam running through Scottish Chief, Loup Garou, and Pantaloon to Phryne, claimed to be the best daughter of Touchstone, were also ready to support Brutus. But \$100 on him to \$10 on the others proved that there was too much confidence in speed shown and a long line of illustrious ancestry. There was an even start, Nabeau making the running, and when a quarter of a mile was finished he had a length the best of Moses B, Brutus taking it easy in the rear. When the horses came to the stand the first time, Moses B had deprived Nabeau of the lead by a few inches, and Brutus had also mended his position, being second, though all were so close that there was only a shade of difference between first and last. From that point the race was entirely between Brutus and Moses B, and a grand race it was. Which and which, now one in the lead and then the other, until they come to the straight run for home. Brutus had the best of it, and the hearts of those who had plunged on him beat easier. They were inflating their lungs for a shout of welcome when it was seen that either Brutus was giving it up or that Moses B had a reserve for the critical moment. At the one hundred yard post Moses B had his nose in front, and every stride added to his advantage, so that when the goal was reached he was hailed the winner by half a length. Hailed is not expressive enough; his victory raised a yell of delight fully as resonant as any of the former surprises had elicited. Time, 3:08½.

SUMMARY.

CALIFORNIA STATE FAIR, SACRAMENTO, September 14, 1888.—Running. The Golden Gate Stake; for three-year olds; \$25 forfeit, or only \$15 if declared on or before September first; with \$400 added; of which \$100 to second, third to save stake. Winner of any three-year old race at this meeting to carry five pounds extra; colts not 1, 2, 3, in No. 19, allowed ten pounds. One mile and three quarters.

M. S. Bryan's ch. g. Moses B, by Leinster—Aunt Jane—Carrillo, 118.....	1
Palo Alto's b. s. imp. Brutus, by McGregor—imp. Teardrop—Courtney, 123.....	2
William Boots' b. g. Nabeau, by Nathan Coombs—Beauty—O'Neil, 105.....	3

Time—3:08½.

Betting—Auction pools: Brutus \$100, field \$15.

The Nighthawk Stake is the event which is popularly supposed to bring out the fastest "milers," and the popular voice is usually correct. Jennie B ran a mile at Sacramento in 1:42¾, and as a fitting memorial a stake was named after her, with the proviso that if the time were beaten it should be rechristened with the name of the winner. In 1882 Nighthawk won the stake in 1:42¼. That was the fastest record for this coast to date, and though beaten since, it has not been lowered in this race, so that it still retains the name. Inasmuch as the winner of this year wears a title which has been rendered famous by a trotting stallion, had he knocked off the extra three quarters of a second, people would have been prone to associate it with the trotter—rather anomalous for a racing event. There were twenty-six nominations, nine of which started. All with pretensions to speed, some of them sure enough clippers. There were nine starters: Idalene Cotton, Almont, Daisy D, Al Farrow, Edelweiss, Welcome, Applause, Not Idle, and Index.

The rating in the pools: Almont \$60, Daisy D \$40, Edelweiss \$20, the field \$35. A great deal of money was posted, with slight variations in the rates. Idalene Cotton was cut down soon after the start, and one of the main supports of the fielders was thrown out. There is little necessity for description, as Almont took the lead at the first furlong mark, and from that to the finish had the race safe. The contest for second place was a good deal closer, second and third choice in the pools running second and third in the race. Edelweiss held the advantage until within a furlong from home, when Daisy D passed her and was within a length of Almont when the mile was completed. Time, 1:42¾.

SUMMARY.

CALIFORNIA STATE FAIR, SACRAMENTO, September 14, 1888.—Running. The Nighthawk Stake, for all ages; \$50 entrance; \$15 forfeit; \$300 added; of which \$100 to second, third to save stake. \$200 additional if 1:41¼ is beaten. Stake to be named after the winner if Nighthawk's time (1:42¼) is beaten. One mile.

W. M. Murry's b. c. Almont (2), by Three Cheers—Question—Madden, 81.....	1
B. Cockrill's b. m. Daisy D (6), by Wheatly—Black Maria—Hennessy, 115.....	2
Mrs. Wolfskill's b. m. Edelweiss (5), by Joe Hooker—Yolone, by Norfolk—Hazlett, 115.....	3

Idalene Cotton, Spray, Al Farrow, Welcome, Applause, Not Idle, and Index ran unplaced.

Time—1:42¾.

Betting—Auction pools: Almont \$120, Daisy D \$80, field \$70, Edelweiss \$40.

The concluding race of the day was a purse for non-winners at the meeting, with allowance as follows: Horses which had not run second allowed ten pounds; the distance, heats of one mile and one sixteenth. Dave Douglas, Sid, Mart Gibson, and Laura Gardner started. In the pools Laura was the favorite at \$100, to \$25 for Douglas and \$20 for the field. Laura took the lead at the start and held it easily through the first heat, winning in 1:51. Sid and Mart Gibson were shut out.

The second heat Laura won very easily. Time, 1:53.

SUMMARY.

CALIFORNIA STATE FAIR, SACRAMENTO, September 14, 1888.—Free purse, \$250; of which \$50 to second. For non-winners at this meeting. Horses that have started and not run second allowed ten pounds. Winners of any race, entered herein, may be withdrawn without penalty. One mile and a sixteenth and repeat.

W. L. Appleby's ch. f. Laura Gardner (4), by Jim Brown—Avail—Hitchcock, 100..... 1
 G. W. Trahern's b. g. Dave Douglas (6), by Leinster—Lily Simpson—Denison, 110..... 2
 B. C. Holly's ch. c. Mart Gibson (3), by Joe Hooker—Jennie Gibson—Richardson, 103...dis.
 B. C. Holly's b. c. Sid (3), by Sidarthur—Vestalia—O'Day, 93 dis.

Time—1:51; 1:53.

Pools sold—Laura Gardner \$100, Dave Douglas \$22, field \$16.

NINTH DAY.

All races declared off, on account of rain, under Rule 18, National Trotting Association.

CLOSE OF THE CALIFORNIA STATE FAIR.

Had the weather of Saturday proved propitious, the closing day of the Fair would, in all probability, have been the most exciting of any. There were three races programmed, and two of them, at least, of a character to awaken the highest excitement. These were the free-for-all—with Arab, Stamboul, Lot Slocum, and Tempest to start—and the three-year old pacers—with Adonis, Yolo Maid, and Gold Leaf sold in the pools Friday night. As Maggie E was in the 2:40, the main interest would have been which would get second, though it was on the cards that Maggie E could be induced to stay out, when the other entries would prove a "guessing lot." Though Arab was a big favorite in the pools sold the night before—and from the loss of form shown by Stamboul, with Tempest hardly up to the speed of the others, it was to be expected that he would rule first in the estimation of the betters—for all that the case was still a matter of doubt. Stamboul may "round to" at any time, and Lot Slocum was brought from the other side of the mountains with a full knowledge of what he had to contend against. He has scored the fastest mile ever made in Montana, and when in the pink of condition he is liable to be troublesome to the very fastest. The pacing youngsters were "dead certain" to make a lively fight, and heats in the teens all through the probable result.

There have been rainy days at the State Fair before, but such a down-pouring as that of Friday night and Saturday morning—and that, too, accompanied by the eastern mixture of loud thunder and sharp lightning—is a new experience.

The action of the Directors in declaring the races off was the wisest course to pursue, as a postponement until Monday would have interfered with other engagements.

OPENING ADDRESS

DELIVERED BEFORE THE STATE AGRICULTURAL SOCIETY AT SACRAMENTO, CALIFORNIA, ON THURSDAY EVENING, SEPTEMBER 7, 1888.

By HON. GEO. A. KNIGHT, of San Francisco.

MR. PRESIDENT, LADIES, AND GENTLEMEN: I hardly know why the honor has been conferred upon me to deliver the opening address of the State Fair in Sacramento. Possibly they have used the same rule lawyers do in obtaining their jury. When we find a man whose mind is a perfect blank upon the issues and subject of the case that is about to be submitted to him, we say that man is a pretty fair juror; he knows nothing about the case, and we think he will take in by absorption, if nothing else, enough to make him arrive at a just and a fair conclusion. In this instance, and with these surroundings, it seems to me that that is the reason I have had the honor extended to me this evening of being requested to deliver the opening address at this annual fair of the State of California. In looking around this room it seems to me now, at the present moment, to be more of an honor than I had anticipated. Here in Sacramento, the first city of this Golden State, a city that has done more towards the civilization of this State than any city in it; built by the pioneers and made by them a stepping stone for our State's proud position; being the sunrise of intellectual and inventive progress that has always characterized our State; it is fit and proper that this place should be designated the capital of the State for the holding of the State Fair.

Have you any idea—of course you have—what a wonderful people we are getting to be? Stop for a moment and know what a wonderful country these United States of America have grown to be, and California a part and parcel of it. The principles that underlie, control, and sustain our national life are to be tested in the coming years of the future. In our present we have much to be thankful for. Sixty million happy, free, and intelligent people, living within the confines of the most wonderful country in the world, speak to the nations of the earth in language that cannot be misunderstood of the success of a government founded by the people, of the people, and for the people, and one that shall never perish from the earth. When we undertake to comprehend the wonderful advancement made by this nation, yet in the swaddling clothes of experiment, it seems like a fairy dream. One hundred years of a nation is in the ratio of primary school time to the child; and yet we are to-day, in art, science, resources, and invention, the leading spirits of the age. The raw material is everywhere present, waiting for science and labor to present new industries and greater demands for our common country. The workshop of industry is open early and late, and the sparks from the anvil of time lightens up the future of reward for the patient Vulcan employed for the interests of our commonwealth. The iron mines of our country, that for a long time lay carelessly indifferent to affording one pound of their priceless treasure, have been opened to equip the steamers of commerce, furnish the busy mill of the

thousand industries, and have bound in fraternal union the Orient and the Occident with the pathway of the iron horse of travel. Our inexhaustible mineral wealth can scarcely be estimated, and the treasures yet hidden in the granite safes of the future, away from the gaze of the present generation, will be valuable incentives for active brain and muscle in our children's children, that their inventive genius and industrious daytime may lead them to the summit of a peaceful plenty.

The sunrise of hope breaks with freshness upon a prosperous future, and the grateful signs of future prosperity cannot be marred by want or slothful indifference. Thousands upon thousands of God's green acres have yielded, and will yield, their abundant harvest, that we may be nurtured and bountifully fed. The beautiful Sierras have furnished their precious metals of trade to better our condition, and the mighty vaults that for centuries have been closed, at the command of scientific research, opened with a spring, and the millions they had treasured from their youth until the snows of age had tipped their rugged peaks have been thrown recklessly in the lap of man, with the command to the subjects at their base to respond in a just proportion. American genius caught the fire from heaven, and it speaks to us from a hundred thousand miles of wire for our family conversations. We may send it into the bosom of the Atlantic and across its waters and hold friendly converse with the islands of the sea. Tired of the pony express, wearied of the post, angry at the expense of the messenger, we conquered time and distance by the wonderful invention that makes the telephone our constant companion and its necessity absolute. Wonderful, say we all, is our present. Still more wonderful the virgin years beckoning us on to greater achievements.

What shall we say of California, the regnant queen, robed in her maiden garments of prosperity and wealth, unspotted yet by a mistake in anything of interest to her people. The Pacific pays her tribute with one thousand eight hundred miles of its waters, and invites the commerce of the world to voyage to her Golden Gate. One hundred and ninety thousand square miles, yielding all kinds of mineral and agricultural wealth, sustaining her, and a million industrious and energetic souls as her subjects, she can progress and prosper from her own natural resources and pour millions of dollars into the treasuries of the world, and though young in years, we ask no favors from the world's cities for fruit and vine, and it seems that God has willed us perennial spring. Piercing the domain of heaven, Shasta and Hamilton invite the world's tourists to pleasures denied them elsewhere, while Yosemite proudly watches us in our effort, and the Sentinel Dome stands godfather for our patriotism and power. Education, science, and art are no longer the companions of wealth and power exclusively. In workshop and stubblefield, our public schools open their doors to our growing children as a potent factor in future civilization, fitting them for the highest type of American citizenship. With all these tributaries to State and national greatness, we bid the future a courteous defiance, and hand to our children's children the ark of freedom's covenant in the presence of a lasting peace.

And now, at this annual congregation of our agricultural people, under circumstances most encouraging and most auspicious, let us bid each other God-speed in our good work, and in behalf of the President and Directors of this institution, I bid you all welcome. Stay with us, be happy, and go to your quiet homes feeling and knowing that it was well to have been here.

ANNUAL ADDRESS

DELIVERED BEFORE THE STATE AGRICULTURAL SOCIETY AT SACRAMENTO, CALIFORNIA, ON THURSDAY EVENING, SEPTEMBER 13, 1888.

By HON. JOHN P. IRISH, of Oakland.

MR. PRESIDENT, MEMBERS OF THE DIRECTORY, AND FELLOW CITIZENS: We are here to indulge in the regular annual congratulations that California has had abundant crops, that she has been blessed in basket and store, that the proceeds of our industry and fruits of our farms and our orchards have been widely distributed throughout the States of our own country and the nations of the earth, to other people to whom we send these as their supplies of the necessities and luxuries of life.

I have been invited by the Directory of this Agricultural Society to say something of a formal nature, to be placed in their annual publication and sent forth to the world, that shall, perhaps, worthily present this great State and the fruits of the industry of our people to others at a distance. I have found myself, by the formality of the occasion, compelled to do that which I have not been in the habit of doing, and this afternoon have written and will read from that portion of the address required for preservation in printed form:

Gibbons says that until men bestow their regard upon their benefactors and not upon their destroyers, the history of the world will be largely a narrative of campaigns and a biography of commanders.

Voltaire declares that there are but few princes who deserve to have their history written, for but few of them deserve to have their memory preserved. In this country instead of the prince we have the politician. Like the poor, he is always with us. Stand on the main street of the commercial metropolis of California and watch the people as they pass, and while you watch keep tally of the battered wrecks of politics, who have sought and held office and are still seeking it. The people turn and look at them with a certain awe. To have aspired to high office or to have held it is not a discredit in a free country; but a life of office seeking, primary manipulation, running conventions, undermining others and making hot contests to get even with rivals, is not a life that testifies to any greatness of character, nor are those who lead it the great men of the State. Look upon the men in the fleeting show I have mentioned! What industry do they promote, what labor do they hire? Has one of them ever made two blades of grass grow where one grew before? Are they our great men and deserving of the tribute of even curiosity? It is true they somewhat rival Solomon in the glory of their raiment, and resemble that philosopher in other things, though not in his wisdom. Their heels spurn the earth as if it were too mean to take the tracks they make, but if they should all disappear to-night what crops would go unharvested, what wheels would stop, what solid interest of this newer France and greater Italy and better Asia would suffer for their taking off? They are men who make politics a profession while others toil and create the commonwealth. They parasite

their way through life, live soft-handed all their days, and dying full of years we strain ourselves to build them public monuments, when in truth the sole return they make to the earth for all its fruits they have eaten without earning, is the fertilizing effect of their carcasses.

You may look on these men till you tire. They are not the great men of California, whose memories deserve preserving, nor the men who should be first honored with the lifted hat. Our great men are those who are patiently developing the marvelous resources of the State, who are studying the ways of Nature, and watching the cunning hiding places of her stores. Many of these men may be named, and many of whom the world has not heard are worthies in the same list.

When Southern California was a poor cattle pasture, Rose, of San Gabriel, went to that wilderness, cherishing the tastes of his German birth-place. It was thirty years ago that he took the southwestern trail, through perils that are now amongst the ancient history of New Mexico and Arizona. His dream was of a land of corn and wine, and it became fact when his first grapes were trodden into wine by the Indians, amongst whom he made his home. He pioneered that new Los Angeles, proved the higher utility of a California "cow county," and showed others how the name of that part of our State could be sent around the world on the fame of its oranges, its figs, trees, and vines.

Ellwood Cooper, of Santa Barbara, is another of the great men of this State, for he has proved the possibility and the profit of olive culture. He has shown that our soil and climate will produce olives as rich in oil and flavor as any that were kissed into perfection by the soft air of Palestine on the slopes of the Mount of Olives, where the Savior rested and overlooked Jerusalem, where he was soon to be hailed as the Son of David. Ellwood Cooper added a new commercial utility to the industries of this State, and his genius has produced olive oil so excellent that the product of ancient orchards on the slopes of the Mediterranean finds no sale in competition with it, though offered at less than half its price. What he has done at Santa Barbara can be repeated along seven hundred miles of the Coast Range on lands kindly to the olive, but otherwise of doubtful utility. Let all Californians honor this gentleman, whose genius and energy have located here one of the oldest industries of the earth.

Another great Californian is dead. He served his country bravely in battle, it is true, but his title to greatness is not only in his record as a soldier. Naglee, of San José, gave his sword to his country when she needed soldiers, but his fame rests upon his being the first experimenter to prove the ultimate and maximum excellence of our vintage, and give a permanent commercial fame to our vineyards, by proving that California is the peer of France in brandy production. With no guide but his genius, focussed upon one subject, he hunted brandy in the chemistry of the soil, guarded its transmutation into the sap which is the blood of the vine, traced it from the vine to the leaf, and thence to the fruit and its distillation, and in the perfected spirit caught the blush and bouquet of the grape, and made it sweet with the aroma of Nature's cologne. This prince of spirits has withstood the tests of hard judges in competition with the brandies of Europe. With a tithe of the work and toil of perfecting it, he could have packed primaries, purchased nominations, and had his name inscribed amongst Senators. But he chose the pursuit that practically benefited his State, by adding to its materialities; therefore lift your hat to the memory of the man who beat France with California brandy, and convicted cognac of adulteration.

There was another field left open, another useful office to be filled, and, without waiting for a convention to nominate him, Colonel Haraszthy assumed its delicate and costly functions by setting for himself the task of proving that California can produce champagne. It took better stuff than we put into office-holders to invest the substance and the energy he gave to the maze of experiments, out of which issued a California sparkling wine. Champagne has in it the soul of the wine, the sparkling, speaking spirit. Until this other great Californian conjured this spirit from his *cuvée* the vineyards of this State were so many bodies only. He touched them with the hand of genius, and each body was quickened by the soul within it. In this contact and conversation with Nature, by which these really great men are planting firmer foundations for California than could be built by all the bones mortared together by the brains of her noisy politicians, there are many co-workers.

In a sunny little valley, on the bayward side of the Berkeley hills, another great Californian has established a horticultural laboratory, wherein the fruits of Japan are undergoing test and trial, and experiments in hybridizing are in progress that are big with importance to our stone fruit interest. There Pyral, of Temescal, has built the tiny bowers in which the marriage of blossoms has been consummated, and he has watched lest a vagrant bee should steal and sip the wedding sweets, or a wandering breeze pollute the bride, and so defeat his well planned match-making. The layman, looking, may be indifferent to this patient toil which, bringing together the germinal principle of two different fruits in the blossom, produces a new fruit with the flavor and excellence of both parents; but let it be remembered that to hybridizing we owe our delicate nectarine, and it was the same process that differentiated the peach and apricot from some common ancestry so remote as to be forgotten. Kings, queens, and emperors schemed, and fought, and died about the Spanish marriage in the time of Louis XIV, but what was that marriage, with all its dynastic consequences, compared with the results which may follow this marriage of flowers by this patient, plodding man, whose unspoken ceremony may give the world a new fruit and industry a new creation by which to increase the profits of its toil?

There are others within our borders who rank with them as benefactors of mankind by having added to the mastery of the resources of nature, and yet when they come and go, we burn no torch and belch no brass music in their honor. Receptions, and levees, and leavetakings are for others, while our real benefactors pay their own fare, carry their own satchels, and are not pointed out in the crowd to the gaze of admiration, or curiosity, or envy.

What has been wrought here by men of whom these are the type, has been simply the result of faith that Nature had hidden in the soil and sunshine of California rare and novel capacities not found grouped together in any other land on earth. Emerson never visited California, but he described our commonwealth in the exordium of one of his remarkable addresses in these terms: "In this refulgent summer it has been a luxury to draw the breath of life. The grass grows, the buds burst, the meadow is spotted with fire and gold in the tint of flowers. The air is full of birds, and sweet with the breath of the pine, the balm of gilead, and the new hay. Night brings no gloom to the heart with its welcome shade. Through the transparent darkness the stars pour their almost spiritual rays. Man under them seems a young child and this huge globe a toy. The cool night bathes the world as with a river, and prepares his eyes again for the crimson dawn. The mystery of nature was never displayed more happily. The corn and the wine have been freely dealt to all creatures, and the never-broken

silence with which the old bounty goes forward has not yielded one word of explanation. One is constrained to respect the perfection of this world in which our senses converse. How wide; how rich; what invitation from every property it conveys to every faculty of man—in its fruitful soils; in its navigable seas; in the mountains of metal and stone; in its forests of all woods; in its animals; in its chemical ingredients; in the power and path of light, heat, attraction, and life. It is well worth the pith and heart of great men to subdue and enjoy.”

Though applied to a distant part of the Union, these eloquent words fulfill the requisites of a description of California, the winterless land.

I have given some time and care to the study of this State and its capacities, and have availed myself of the experience of others. I have compared it with other lands noted in the ancient and the modern world for their scenery, their climate, and their fertility, and out of the trial of every such comparison California comes mathematically vindicated as a region combining more advantages which add to the desirability of life, and furnish the means of comfortable and luxurious existence, than any other land on earth.

But Nature has not here broken the string and carelessly scattered her jewels, so that in finding and using them there shall be no difference between idleness and industry, between thrift and wastefulness. I have used the names of men who deserve to be called great in our annals, *because* they had the steadfast courage to pursue lines of original investigation into the capacities of the State, and to finally prove them, and in the proof open the way to thousands of others by will and work to earn bread, and to do it inspired by the hope of a competency.

Looking over the vast and varied field of California's materialities, we may say with Emerson, this State “is well worth the pith and heart of great men to subdue and enjoy.”

I have had no time to prepare comparative tables showing the increase in our staple articles of commerce, since bold experiment proved that their production was possible. In outline, then, it may be affirmed as a fact demonstrated that this State produces in lush abundance the grains and grasses, fruits, nuts, and vegetables which Nature has scattered widely over the earth, but only here has grouped in a contented and profitable companionship. The rural proprietor in California is indeed an international merchant, for he is producing crops that are amongst the daily necessities of life in every civilized land. The Frenchman must soon consider our wine crop, for his own is receding. The English market takes now one sixth of our raisin crop, and the time will come when the Christmas plum puddings will lack plums unless California has a surplus of raisins for export equal to the English demand. With two crops of wheat stored in our warehouses, bread is rising in France and England, and California's surplus must stand between famine and the seventy millions of bread eaters in the two countries. The source of olive oil supply along the Mediterranean is failing, and if it were not for American cotton seed and lard oil, Marseilles and Lucca would have no olive oil to export. The foreign maker of this oil seems to have nothing left but his brand, and that does duty on oils that would not know an olive tree from a manzanita.

So I might show in the case of production of the staples as well as the luxuries of life that the whole world looks to California as the freshest and best source of supplies that are extinct or rapidly exhausting in their ancient locations. The effect of this fact is seen in the advancing value of real estate and its improvements in this State.

We have occasion to boast of the rapid increase in the assessed valuation of the State, but we may well be proud when we analyze the increase. It is in the real estate, the soil, the source of all wealth, and power, and comfort. In 1878 the value of real estate and its improvements was assessed at \$467,026,552. In 1888 the same assessment is \$909,635,331, while exclusive of railroads, the State shows this year only \$174,409,378 in wealth aside from real estate and improvements. This is a fact that will startle the publicist and statistician, while it will gratify the pride of a Californian, for it shows that our wealth and its increase are due to the high farming of our soil. True, part of this realty is in city property, but every vara of it gets its value from the fields and the fruits of rural industry.

This great exhibition, the harvest-home of California, is the proof and sample of what the farmers of this State are doing. It is ineffably California manifest in the flesh. To the eye of the trained observer it offers evidence of facts of the highest importance to mankind. It proves that the utilities of the soil are nobler here than elsewhere, and as the utility of the soil is refined, the value of the product per acre increases, and with that increase goes the most important economic fact that can be urged in behalf of our noble commonwealth—that fact is, the small acreage needed here to support a family and secure a competence. I know men who have sought California within the last six years, fugitives from misfortune or stricken in strength, wondering only if the clouds would ever lift, and if the sun would ever shine again for them. Encouraged to begin life over on twenty acres of California soil, planted in vines and trees, these men are now on the road to fortune. Surrounded with plenty, with sunshine without and within, they can heartily repeat what a venerable Sutter County farmer said to me once: “When the message comes to me, I am ready for the great change; but I go, believing that the Good Architect of all things commands me to a country that is no fairer nor richer nor kinder than California.”

Let the word pass through the nations that California is the poor man's land—if a man can be called poor who is willing to work—and that here a home on twenty or forty acres is worth a principality in lands less favored. And let us who are here, in the midst of this constant ferment of nature toward useful production, bid welcome to all honest comers who are willing to work, so that our seven hundred miles of rich foothills and our valleys in whose vast areas you might lose ancient Egypt, or Greece, or Italy, will blossom with the homes of millions of free men, who, as each radiant day yields to each radiant night, will turn their prayerful hearts to the source of all good gifts, and with voices reverently joined, say with us God bless the commonwealth of California.

A WINTER FAIR.

CALIFORNIA'S PRODUCTS SHOWN IN DECEMBER, FRESH FROM TREE AND VINE—THE OROVILLE CITRUS EXHIBITION OF 1888.

By MR. S. S. BOYNTON, Editor of "Oroville Register."

The residents of Oroville and vicinity, realizing that we have here the finest citrus fruit belt in the Golden State, last year determined to show the world what this portion of the State could produce in this line. So gratifying were the results, so widespread was blown the fame of our orange groves, so rapid the influx of people, so many hundreds of acres were set to the orange, the olive, and the vine, that this year it was determined to hold a second Citrus Fair, on a larger and grander scale than had ever before been attempted in California. For this purpose a mammoth canvas tent, covering over ten thousand square feet, was erected and arranged for exhibiting the winter fruits and flowers of this part of California. This temple to Pomona, the goddess of fruit, was opened to the public on Monday evening, December 17, 1888; and below will be found a description of the grand display.

THE PAVILION.

The pavilion for the second Citrus Fair is a mammoth building one hundred and sixty feet long and sixty-four feet wide, with arches sprung from side to side so as to leave the whole space clear of all posts or pillars. The center of the building is thirty-four feet high, thus making a magnificent structure for the display of fruits. The area of the floor is ten thousand two hundred and forty square feet, while over thirty-five thousand feet of lumber was required in the framework of the building. In the main pavilion there is twenty-seven thousand feet of canvas, and in the extra roof about fifteen thousand feet more. Owing to the material of which it is formed, the pavilion is as light as though made of glass, while at night it is brilliantly illuminated by thirty-six electric lights. The space inclosed is nearly three hundred thousand cubic feet.

A Citrus Fair in Oroville, Butte County, California, during the month of December, is of more than local importance. Oroville is situated at the base of the Sierra Nevadas, in 39 degrees and 30 minutes north latitude, so that the exhibition of citrus fruits in that town during the winter season may be taken as an ocular demonstration of the climate of a large part of Central California.

Readers will bear in mind that the great cities of St. Louis, Baltimore, Philadelphia, and Cincinnati all lie in about this latitude, and that all the Southern States are south of this parallel. In making any comparisons of climate, as well as productions, this must be taken into consideration.

We annex a table showing the average annual temperature of a number of localities on the Atlantic Coast, but all south of the latitude of Oroville: Norfolk, 59°; Lynchburg, 57°; North Carolina: Charlotte, 61°; Hatteras, 62°; Fort Macon, 62°; Smithville, 63°; Wilmington, 63°; Asheville, 54°;

South Carolina: Charleston, 66°; Aiken, 62°; Georgia: Augusta, 65°; Savannah, 67°; Atlanta, 62°; Florida: Jacksonville, 69°; Cedar Keys, 71°; Key West, 78°; Sanford, 72°; Pensacola, 68°; Alabama: Mobile, 67°; Montgomery, 65°; Mississippi: Vicksburg, 66°; Louisiana: New Orleans, 69°; Shreveport, 66°; Arkansas: Fort Smith, 59°; Little Rock, 62°; Tennessee: Chattanooga, 60°; Memphis, 61°; Nashville, 60°; Kentucky: Louisville, 57°; Missouri: St. Louis, 55°; Texas: Galveston, 70°; Brownsville, 73°; Fort Davis, 60°; El Paso, 63°. The average for Oroville during a series of years is 64.5°. As many of the points named lie far south of Oroville, it will be seen that California has a milder temperature than any portion of the Atlantic Coast in the same latitude. Thus, for instance, Cedar Keys is in 29°, Key West 25°, Charleston 34°, Savannah 32°, Mobile 31°, and Vicksburg 32°, so that those localities with a higher mean temperature are much further south.

If the reader desirous of knowing something of the particular locality about Oroville, will take a map of California, he will find that the town lies on the south bank of the Feather River, just where that stream breaks forth from the mountains. The town is partly surrounded by hills, especially upon the east and north. It is thus shut off from the cold, north winds that sweep down the Sacramento Valley during the winter months, making the temperature lower than it is along the low foothills. This is one reason why the citrus fruits do so well about this town. Another point is, that the soil is of a warm, or gravelly character, with good drainage. This warm soil, and the freedom from cold winds, has much to do with exemption from severe frosts, so that this is a favored locality for the growing of citrus fruits.

Inasmuch, however, as this same foothill belt, and the same kind of soil are found for a long distance at the base of the Sierra Nevada Mountains, the same general conditions for fruit growing are met with.

While the orange has reached a more decided development about Oroville than at any other point in Northern California, it is not an isolated spot, for oranges are grown in all counties that touch the low foothills of the Sierras, from Shasta to the extreme southern end of the San Joaquin Valley. All that is needed in many places is a more extensive planting to bring about the grand results that have been reached at Oroville. This town has, however, two advantages that many other localities do not possess—first, the greater width of the mountain slope from the summits of the Sierras to the edge of the valley; and second, the vast flow of water afforded for irrigation purposes. Before giving an account of the fair held it will not be out of place to call attention to these two points. At the spot where the Feather River debouches from the Sierras, it is further to the summit of the mountains than either north or south of this locality, hence the distance is greater to the deep snow line, and this is claimed to have a great influence on moderating the climate. In this locality it is thirty miles to an elevation of three thousand feet, so that an immense area lies to the east of Oroville before any snow belt is reached. Both north and south this belt is narrower and the distance from the valley to the snow line is greatly reduced.

With regard to water facilities this is an exceptional locality, as Feather River affords an immense flow of water at all times in the year. State Engineer Hall points this out in his report, when he shows that the flow of this one stream is more than double all the water in the great counties of Los Angeles and San Bernardino.

In addition to this, there are numerous large creeks flowing from the Sierra that afford fine irrigation facilities.

The Citrus Fair held in December, 1888, in Oroville, was the fourth fair of the same kind held in Northern California, the first being at Sacramento, in January, 1886; the second at the same city, in December, 1886; the third at Oroville, in December, 1887; and the fourth being the one just held. The latter was the most remarkable of the four in several respects. At the first fair, ten or twelve counties were represented and exhibited their products; at the second, twenty-two counties displayed their citrus and other productions; at the third, all of Butte County was represented, while at the fourth less than half the territory of Butte sent any products, so that while the fair possessed no less merit than either of the others, it demonstrated that in this vicinity all the varied productions of all Northern California are produced. That this may be the more apparent, we add a list of the various exhibits.

Exhibits at the last Oroville Citrus Fair. Oranges: Seedling, Naval, St. Michael, Konah, Mediterranean Sweet, Malta Blood, Tangerine. Lemons: China, Eureka, Sicily, Lisbon. Olives, olive oil, tobacco. The olives were shown on branch and loose; the tobacco in its green or growing state and when dried. Potatoes, fifteen exhibitors; melons, five exhibitors; cotton, seven exhibitors; raisins, sixteen exhibitors; prunes, seven exhibitors; figs, eighteen exhibitors; both the White Adriatic and the common varieties being shown. Bleached fruits, six exhibitors; sun dried fruits, twenty-four exhibitors; almonds, fifteen exhibitors; many varieties being shown. Walnuts, twelve exhibitors; chestnuts, four exhibitors; quinces, eight exhibitors; grapes, five exhibitors; apples, forty-four exhibitors; pears, seventeen exhibitors; pomegranates, seven exhibitors; persimmons, twelve exhibitors; while in addition there were shown pumpkins, popcorn, hops, beans, strawberries, sugar beets, peanuts, green tomatoes, the latter from ten localities; egg plant; oils and extracts from the citrus fruits; seedling date trees, honey, licorice, celery, lettuce, onions, blackberries, raspberries, shadocks, citrons, flax, banana plants, green peas, and green peppers.

The pavilion in which the fair was held was, to a certain degree, emblematical, for nowhere on the Atlantic Coast could a Citrus Fair have been held in December, with no other protection but a canvas covering. This pavilion was a mammoth structure, one hundred and sixty feet long by sixty-four feet wide, with arches sprung from side to side so as to leave the whole space beneath clear of all posts or pillars. The center of the building was thirty-four feet in height, thus making a magnificent building for the display of fruits. The area of the floor was over ten thousand square feet; nearly forty thousand feet of lumber, and forty-two thousand square feet of canvas were used in making and covering the pavilion. Owing to the material of which it was formed, the interior was almost as light as though covered with glass, while at night it was brilliantly lighted with a large number of electric lights. The space inclosed was nearly three hundred thousand cubic feet. Within this grand temple of Pomona, the goddess of fruits, there were six large, fine orange trees, loaded down with their rich golden fruit. One writer, in describing this scene, says: There were grottoes, cottages, and great whirling wheels covered with oranges, and propelled by motor power that left great orange ribbons in the track of their revolutions, and all so perfect and beautiful that they would have excited the admiration of an artist. Great crates of oranges, as large as header beds, and all so clean, large, bright, sweet, and delicious, as to cause visitors from snow-clad countries to stop and gaze in wonder at what has been here accomplished. We saw ears of corn, fifteen inches long; great pumpkins and squashes as large as washtubs, turnips as large as peck measures, and great streaked rosy apples the size of sugar bowls. The exhibition

building was erected in the Court House square, over graceful palms and orange trees, their branches laden with ripe, glossy fruit. We saw orange trees that had buds, blossoms, and oranges on them, ranging from the size of marbles up to the fully ripe fruit. The building was supplied with electric lights, and festooned overhead with flowers, evergreens, and fruits. When we entered we were reminded of the fabled palace of Circe, but it could not have compared with this in gorgeous richness of coloring. We were reminded of the New England minister that gave a glowing description of heaven, when an old Californian nudged his neighbor and said, that is California.

The "Marysville Appeal" editorially said: Such a scene of beauty has not been excelled since the days of Aladdin's palace. Each exhibit is a gem in itself, and the general decorations present an originality of design surpassing description. Every part of Butte County is represented [the western half was not], and while the main part of all the exhibits consists of oranges, limes, and lemons, yet every kind of tropical and semi-tropical product may be found; all kinds of cereals, beautiful flowering plants, rare palms, melons, apples, and all kinds of vegetables, etc. This fair must be seen to be appreciated, it cannot be adequately described—so beautiful, so rich looking, that two hours spent in viewing it passes away as quickly as ten minutes usually do.

Mr. Shinn, the editor of the "Overland Monthly," in writing to the San Francisco "Examiner," thus spoke of the fair: The whole life of this region is now centered in the orange pavilion in the Court House square. The display there is worth a trip from New York to any person who wishes to see what the Sierra foothills can do. There ought to be hundreds of people here from San Francisco. The full development of this region means hundreds of thousands of dollars in the pockets of San Francisco merchants, bankers, etc. The display is most artistic and beautiful, and it appeals to every esthetic sense as well as to the great American pocket. He further adds, here are tomatoes, green and ripe, and fresh growing vines from the open air; here are watermelon vines and pepper plants, lime trees, orange flowers, and the most tender of flowering plants, grown at an elevation of from five hundred to one thousand feet. Here are strawberry plants with green and ripe fruits, and raspberry bushes loaded with berries. These things mean that this is in the midst of a thermal belt such as the best of Southern California so fortunately possesses.

The San Francisco "Bulletin," in commenting upon the fair said: Exclamations of surprise at the peculiar effects of the novel display are made by nearly all visitors on entering the pavilion. Oranges are everywhere in the most unique designs; the green of the pine foliage and the orange of the golden fruit are worked in together in all combinations. Some mention has been made in previous letters of the displays, but their merit and novelty demands closer attention, and this the writer will endeavor to here give for those who may not see the fair for themselves.

Exhibits are arranged on all sides of the pavilion and in two rows through the center. The Palermo citrus colony attracts attention by a large wire summer house, half covered with oranges, with flowers and with exotics grouped about. At its side, under a growing orange tree, are horticultural products from the Merrimac District, up four thousand five hundred feet in the Sierras. Near by D. N. Friesleben, who is General Superintendent of the fair, has a unique display. A heart-shaped design, seven by nine feet, composed of one thousand two hundred and eighty oranges, is suspended from the ceiling; below is a double circle of oranges, twenty-four feet in circumference, inclosing the words "Citrus Belt;" below this is a

beehive of oranges on a base five feet square, all covered with the same fruit; below the hive, on the floor, is a five-pointed star of oranges, the five letters B U T T E are in each point, and around them are various vegetable and cereal products. The walk to the hive is represented by minerals. The whole display is inclosed by a circle, with a gate four by five feet, covered with oranges like all the rest. Over five thousand oranges are in this one design, which is presumably a rebus. The answer to the puzzle is that Oroville is in the heart of the citrus belt, that orange culture is the important industry, and that Butte is the star county inside of the Golden Gate.

The "Marysville Democrat" said of the fair: All the products of semitropic and temperate climes blend in harmony, yet abound in profusion, pagodas, temples, crosses, forts, parterres, and banks of oranges. Apples, lemons, limes, olives, ripe fresh strawberries, dried fruits, raisins, vegetables, mingled with ferns, flowers, and shrubbery, abound on every hand.

The "San Francisco Chronicle" thus aptly sets forth the chief designs and emblems in the fair: In novelty and originality of designs this fair excels any previous display of citrus fruits ever held on the Pacific Coast. The designs for exhibiting fruit are marvelous and grand. They include mammoth emblems, taking thousands of oranges to form a single model, and every shape and form of design that seems suitable for display has been brought into use in this magnificent exhibit of the products of a single county. One of the grandest of these is under the name of "Rock of Ages," and the execution of this design took ten persons four or five days to complete. Upon it alone six thousand oranges have been used. Another splendid exhibit is a Japanese pagoda, in which nearly five thousand oranges and lemons are handsomely displayed. A wire summer house, ornamented with citrus fruits and filled with the choicest products of this clime, is a magnificent spectacle. Another lovely design is a lattice work building covered with ivy and oranges, and in which are a myriad of products, while two fountains add to the beauty and attractiveness of the scene. An immense golden heart, covered with thousands of oranges, a grand monument on which are displayed thirteen thousand samples of the same luscious fruit, and a huge basket in which are piled up fully as many oranges as on the monument just named, are among the most striking features in the pavilion.

There are many lovely and striking designs of smaller dimensions displayed by the Parlors of the Native Sons and Daughters, by the Lodges of Rebekahs, and by the Grand Army Post. In the latter display is a fort, from which protrude a number of cannon, and these are filled with oranges clear to their muzzles.

While the oranges predominate in this grand exhibit, yet the olive, fig, pomegranate, apple, lemon, shaddock, lime, grape, and other fruits are handsomely displayed, and there is a grand showing of lovely flowers and potted plants.

The Chico "Enterprise," in speaking of one feature, says: Against a dark background towers a huge cross, composed entirely of oranges, six thousand being used in this display alone. This cross stands on a rocky mound, mineral specimens of this section, calla lilies, and ferns growing between the rocks. A bank of oranges slopes from this down to an evergreen opening, the whole occupying the entire end of this wonderful pavilion. Over the cross is a large star, and in large fancy letters of oranges the words "Rock of Ages."

A lady correspondent wrote: The daintiest little nook in the fair pavilion is the Parlor of Golden Fleece Lodge, N. D. G. W. Symbolic of the

name, it is of gold and white. The floor covered with fleecy rugs; furniture, mantel, and ornaments are composed of oranges; filmy white curtains are draped from the windows and hung at the entrance. Under the large overhanging orange tree is a fern garden—a fitting surrounding of this most charming retreat. The opposite corner is occupied by Argonaut Parlor, N. S. G. W. Here on a smooth shaven lawn stands an Elizabethan cottage, built of oranges. The lace draped windows are hung with fern baskets. The door stands invitingly open as if to tempt some native daughter to walk into the parlor. Stepping across the lawn one steps from '88 to back into the log cabin of '49, with all its pioneer appliances, the pick and shovel, the kettle of baked beans, the cradle in which there is some gold specimens, just panned out. All these so dear to the hearts of those grand old Argonauts who, by their early efforts, have made citrus fairs possible.

LIST OF PREMIUMS AWARDED.

List of premiums given to exhibitors at the Second Citrus Fair at Oroville, Butte County, California, beginning December 17, and ending December 22, 1888:

ORANGES.—Best individual exhibit—Thirty-five exhibitors—Joe Gardella, \$25; L. N. Eyler, \$20; Mrs. James C. Gray, \$17 50; W. M. Pence, \$15; Ella Wilcox, \$12 50; Mrs. B. Bussey, \$10; J. Seconi, \$7 50; Brier & Welch, \$5; J. B. Rider, \$3; Mrs. Z. M. Sexton, \$2.

ORANGES.—Best twelve budded—Eight exhibitors—Oroville Citrus Association, \$5; G. W. Sovereign, \$3; Mrs. White, \$2.

ORANGES.—Best twelve seedling—Thirty-two exhibitors—Mrs. S. J. Bussey, \$3; Brier & Welch, \$2; J. B. Rider, \$1.

ORANGES.—Best cluster—Joe Seconi, \$5; G. O. Sovereign, \$3; J. J. Smith, \$2.

ORANGES.—Twelve largest—Eighteen exhibitors—Wm. Danforth, \$5; Mrs. S. Gummow, \$3; Mrs. James C. Gray, \$2 50.

ORANGES.—Best budded—Three exhibitors—Ella Wilcox, \$10; Joe Seconi, \$5; Mrs. James C. Gray, \$2 50.

LEMONS.—Best one exhibitor—John S. Hutchins, \$10.

OLIVES.—Four exhibitors—Annie Ragan, \$5; Mrs. Z. M. Sexton, \$3; Joe Gardella, \$2.

OLIVE OIL.—Three exhibitors—Mrs. Sexton, \$5; Annie Ragan, \$2 50; Joe Gardella, \$1.

MOST TASTEFULLY ARRANGED EXHIBIT OF CITRUS FRUIT BY ONE INDIVIDUAL.—Seven exhibitors—Ella Wilcox, \$10; Joe Seconi, \$7 50; Mrs. James C. Gray, \$5.

LARGEST EXHIBIT OF ORANGES BY ONE INDIVIDUAL GROWER.—Three exhibitors—Joe Gardella, \$50; Mrs. N. Calkins, \$25.

GENERAL EXHIBIT.—Largest and most varied exhibit by one person—M. V. Roe, \$50; W. W. Merrithew, Mesilla Valley, \$30; J. Entzman, South Table Mountain, \$20.

BEST FLORAL EXHIBIT.—Two exhibitors—Mrs. M. A. Varney, \$10; Special \$10 to Mrs. Varney; Thermalito Company, \$5.

TOBACCO.—Five exhibitors—C. De Bock, \$5; Joe Entzman, \$3; Joe Freydt, \$2.

LARGEST DISPLAY OF MINERALS.—A. Heckart, \$10; M. V. Roe, \$5.

POTATOES.—Fifteen exhibitors—J. H. Hoad, \$5; E. C. Bowers, \$3; Henry Covert, \$2.

MELONS.—Three exhibitors—A. Heckert, \$2; M. V. Roe, \$1.

COTTON.—Seven exhibitors—J. J. Sanders, \$2; Mrs. M. A. Varney, \$1.

RAISINS.—Sixteen exhibitors—C. H. Leggett & Son, \$10; C. L. Durban, \$5; Henry Preston, \$2 50.

PRUNES.—Seven exhibitors—Jesse Wood, \$5; J. S. Hutchins, \$3; B. Russell, \$2.

FIGS.—Eighteen exhibitors—White Adriatic, C. H. Leggett & Son, \$5; R. Parker, \$3; Mrs. A. S. Hendricks, \$2.

BLEACHED FRUITS.—Six exhibitors—S. L. Skillin, \$10; Jesse Wood, \$5; M. V. Roe, \$2 50.

SUN-DRIED FRUITS.—Twenty-four exhibitors—M. V. Roe, \$5; B. Russell, \$3; Joe Entzman, \$2.

ALMONDS.—Fifteen exhibitors—R. Parker, \$5; I. L. & R. Mansfield, \$3.

WALNUTS.—Twelve exhibitors—W. W. Merrithew, \$5; W. M. Pence, \$3.

CHESTNUTS.—Three exhibitors—Ole Lund, \$3; Joe Daniels, \$3.

QUINCES.—Eight exhibitors—S. Simonson, \$2; L. N. Eyler, \$1.

GRAPES.—Five exhibitors—I. L. & R. Mansfield, \$5; George Spitzler, \$2.

APPLES.—Forty-four exhibitors—P. H. Perry, \$15; W. M. Pence, \$10; J. H. Hoad, \$7 50; M. V. Roe, \$5; E. P. Zink, \$3.

PEARS.—Seventeen exhibitors—M. V. Roe, \$5; L. N. Eyler, \$3; G. B. Rogers, \$2.

POMEGRANATES.—Seven exhibitors—R. Parker, \$3; W. W. Merrithew, \$2.

PERSIMMONS.—Twelve exhibitors—W. M. Pence, \$5; Mrs. H. C. Bell, \$3; M. V. Roe, \$2.

PRESERVES AND CANNED FRUITS.—Thirteen exhibitors—Mrs. Dr. Bussy, \$15; M. V. Roe, \$10; Mrs. A. S. Hendricks, \$7 50.

MOST TASTEFULLY ARRANGED EXHIBIT.—Mrs. S. S. Boynton and Mrs. H. C. Bell, \$40; Argonaut Parlor, N. S. G. W., \$20; Golden Fleece Parlor, N. D. G. W., special prize, \$20.

Largest number of budded orange trees planted in orchard by individual exhibitor during the year 1888—Daly & Sargeant, \$20; R. C. Chambers, \$10.

Special premium offered by E. W. Fogg and D. K. Perkins—Largest and best exhibit of oranges in excess of ten thousand, by individual producer—Joe. Gardella, \$100; Mrs. N. Calkins, \$100.

Special prize, \$25 to Palermo Company—Display of citrus and deciduous fruits, plants, and flowers.

Special prize, \$25 to Thermalito Company—Display of ornamental, shade, citrus, and tropical trees.

PUMPKINS.—John Raferty, \$3; J. E. Allen, \$2; J. N. Howard, \$1.

ALFALFA HAY.—W. M. Pence, \$2 50.

POPCORN.—A. Parish, \$2; A. Heckart, \$1.

HOPS.—Frank Cress, \$2; David Whipple, \$1.

BEANS.—C. L. Yetter, \$2; H. Wright, \$1.

STRAWBERRIES.—Robert Frisbee, \$2 50.

SUGAR CANE.—Mon Ming, \$2; R. C. Grubbs, \$1.

BEETS.—G. R. Hill, \$2.

SUGAR BEETS.—George Peters, \$2.

PEANUTS.—J. S. Hutchins, \$2; I. L. & R. Mansfield, \$1.

GREEN TOMATOES.—B. Russell, \$2; Joe. Gardella, \$1.

EGG PLANT.—H. Covert, \$2.

OILS AND EXTRACTS FROM CITRUS FRUITS.—Norton & Ekman, \$5.

SEEDLING DATE TREES.—Mrs. W. Elliott, \$1.

SEEDLING ORANGE TREES.—Christman & Hilton, \$2 50.

HONEY.—F. Peters, \$1.

CALIFORNIA WOODS.—A. Heckart, \$5.

VEGETABLES.—W. A. Coates, \$5.

LICORICE.—Wm. Dunstone, \$2.

LARGEST SINGLE ORANGE.—Mrs. E. Breslauer, \$1.

GOLD QUARTZ.—McMillan Bros., \$3; E. W. Fogg, \$5; M. H. Morgan, \$5.

OLIVE OIL PRESS.—Mrs. Sexton, \$5.

OPENING ADDRESS.

DELIVERED AT THE SECOND ANNUAL CITRUS FAIR HELD AT OROVILLE,
BUTTE COUNTY, CALIFORNIA, DECEMBER 18 TO 22, 1888.

By HON. A. F. JONES, of Oroville.

In presenting Mr. Jones, Hon. John C. Gray made the following remarks:

LADIES AND GENTLEMEN: We meet here to-night for the purpose of opening the Second Annual Citrus Fair of Butte County. It is, indeed, a beautiful sight! All around, and on every side, artistically displayed, are the citrus fruits of Oroville and vicinity. It is no wonder that those who have been absent from this place for a few years fail to find words to express their wonder and their admiration. We, who have lived here all along, are amazed at the result of our united efforts.

But it is not for me to utter the words that are to bid you welcome here to-night. I will introduce to you, for that purpose, one who was and is the leader in making this marvelous change; one whose energy and good sound business judgment woke our people to the fact that we live in a land, the fairest on earth. I have the pleasure of introducing to you Hon. Albert F. Jones:

MR. CHAIRMAN AND CITIZENS OF BUTTE COUNTY: In extending in your behalf the courtesies of Oroville, and a hearty welcome to those who have come from abroad to witness this exhibition, and ascertain by personal observation whether citrus culture is an experiment simply with us, or whether it has progressed to a realized success, I beg leave to call your attention briefly to the history of the growth of this industry in this section of California.

It was prior to the year 1860 when the semi-tropic nature of our climate attracted the attention of the residents of Bidwell's Bar and caused an ex-

Judge of this county to plant there a two-year old seedling. Though twice subjected to the hardship of a change of location, that tree flourishes to-day, and yields an average annual crop of about two thousand oranges. It has stood the test of our most rigorous winters for thirty years, and to-day it is not far from a correct statement that one half of the trees now in full bearing around us have been grown from the seed of the fruit of the Bidwell Bar tree. It may seem somewhat strange that people of Butte County have been so slow in accepting the conclusion arrived at by the planter of that tree, and that the culture of the orange, lemon, and lime as a commercial proposition commenced sooner. But you must remember that a young and thrifty orange tree sold in Oroville but five years ago at \$5 per tree, and the consequent expense of an orchard would have been enormous. Again, ours were a people whose minds looked not to the golden fruit, but to the gold of the earth for fortunes. The miner was used to his pick and shovel, and cared only for fruit as his gold dust could purchase. The abundant yield of wheat, barley, and oats furnished quicker returns to the farmer, to whom the culture of the orange seemed a thing for southern climes only. The cattle man dreamed only of his herds on a thousand hills for wealth, and the merchant found his dreams satisfied by an overflowing till. The older citizens contented themselves with planting trees for ornamental purposes, and were surprised, as time rolled on, to find that "Beauty had become the bride of use," and the town of Oroville a perfect orange grove. With it the lime, lemon, citron, pomegranate, and olive yielded a rich harvest, and the question now is not "What can be produced here?" but "What is it we cannot produce?"

In 1886 the twenty men who resolved to make an actual test of orange culture on a large scale even doubted their success; but in this pavilion you will find from their young orchard specimens of fruit that defy competition. The work of the Oroville Citrus Association is accomplished. It has demonstrated the unrivaled superiority of the soil and climate for citrus culture; it has lessened the cost of planting orchards; it has increased the population of your county; it has caused to be builded, like magic, the flourishing colonies of Thermalito, Palermo, Rio Bonita, and Villa Verona; it has given confidence to the older settler, and new homes of modern build and attractive and permanent improvements attest his intention to live the remainder of his days within its confines.

In 1885, at the Citrus Fair held at Sacramento, Butte County was awarded the first prize, the following year the second only, because the narrow space confined her exhibit where she could not properly compete.

One year ago to-day, in a canvas pavilion on this spot, we had an exhibition that had never been equaled, and which was said to be too grand to be excelled. Such prophecies were false, for we have before you here an exhibition that surpasses it in every way. Look around you. Palermo's villa, golden-crowned, and embowered with flowers of spring time, flourishing here at Christmas, greets you on the east; Messalia's bounties on the north, with Bangor, Wyandotte, and Honcut; on the south Thermalito's tropic bower, with flowing springs and numberless palms, aids to completely surround the pagodas, columns, and pyramids of Oroville; while west of all, guarded on each side by the sons and daughters of the Golden State, rises the cross upon the rock of ages, and reminds us that faith in the land in which we live, and unceasing labor for its advancement, is the cross to which all good citizens should cling, imbedded in a foundation not made of shifting sand or wavering faith.

Within this inclosure is an exhibition which (stop and think) the whole of Europe could not produce material for, even though she called together

the olive from sunny Italy; the grape from the vine-clad hills of Germany; wheat and grains from Russia; the orange, lemon, and lime from the Mediterranean shores: canned, preserved, and evaporated fruits from other sections. And yet, with all these, we have not yet exhausted our resources. What country is it other than this, that will enable successful propagation of the cherry and the orange side by side? Where the almond, walnut, and chestnut of Italy and America grow in one yard with the banana, bamboo, pomegranate, fig, olive, and vine, and the peach, pear, quince, apple, nectarine, tobacco, and melons find congenial soil.

Let us not rest in our endeavors to fully test to its utmost the resources of our county. Foreign capital will soon assist us; the great trunk railroads of the East are pointing this way. To-night, as I speak, I see their agents listening with interest, and he who now makes two blades of grass grow where but one flourished before, is building wisely, not only for himself and his people, but a rich heritage for those whose welfare is great to him after he has gone.

We shall go through this world but once. If there be any good we can do, let us do it now, for we will not pass this way again.

In conclusion, I bid a welcome to all our visitors in behalf of Oroville, and then open this exhibition for your thorough inspection and earnest criticism.

SPEECH OF J. W. BRIER, JR.

LADIES AND GENTLEMEN: It is not within the compass of words to exaggerate the beauty and grandeur of all that we behold. Oroville, her door-yards attractive in the garniture of lawn and December blooms, and aflame with golden orbéd fruit: rejoicing, especially, in the unexampled brilliancy of this exhibition (reminding one of the sun rising under a snowy cloud), may at least challenge comparison with any aboriginal community of Central California. As for those prodigies of the south, whose fame is trumpeted throughout the world, we shall be only too proud if they continue to deserve one half of all that has been spoken in their praise. We cherish neither envy, nor aversion, nor unbecoming pride. We do not resent the prosperity of any part of our beloved commonwealth. We are for "the country, the whole country, and nothing but the country." We cannot consent to any plan of partition, and we desiderate soundness of judgment in those who would alienate its affections, or disturb the perfect harmony of its pursuits.

The gentleman who opened the exercises on yesterday evening hinted at a line of thought that I shall take the liberty of pursuing. Confessedly unique as is the arrangement of this exposition, reflecting especial credit upon the Directors, against whom for a lengthened period the elements were at war, I could have wished that the pavilion, first attracting the eye of the visitor, had given place to the oriental pagoda, second in the central line of display. This arrangement would have been in keeping with the chronological record. The first design, a model of decorative taste, is of an architecture introduced to the Valley of the Ganges by the Arabian conquerors. And this was the first stage reached by the migratory orange in its progress around the world. From two species—the sweet and bitter oranges of Southern China and the Burmese Peninsula—have sprung more than fourscore varieties, cultivated alike for the singular beauty of the tree, and the commercial value of its fruit. Hence, yonder pagoda (whether Chinese or Japanese I am not called upon to decide) is readily suggestive of the birthplace of the orange, as the Indian pavilion is of its wonderful

migratory career. To-day the hills of Northern India abound in wild orange trees, massed in the heated jungle or dispersed in picturesque groupings on sloping upland or brow or beetling cliff.

Just before us, as you see, is an Egyptian obelisk. It was in the ninth century the Mohammedans transplanted the orange to Egypt and Arabia the Happy. In the century following it found its way to Macedonia and Sicily. It accompanied the Saracenic conquerors into Spain and Africa. The returning Crusaders introduced it into the genial soil and atmosphere of southern France. In the fifteenth century it was brought to Italy by the Genoese navigators; and, from these countries it has, like much that is good and nearly everything that is bad, found its way to this extreme margin of the western world. Just beyond the obelisk you are attracted by the graceful, airy proportions of a modern summer-house, with its genuine lawn, fresh and vernal, transplanted from Thermalito itself. Very near it is a miniature orange grove, with its cottage and parterre, such as any modest family may reasonably hope to possess. At the extreme western limit of this lofty pavilion blazes the Star of Empire, and beneath it, nearly touched by its rays, the words, "Rock of Ages," are bent over the all prevailing symbol of the modern world. That symbol seems to create an atmosphere peculiarly its own; and when the choir within its precinct discourses anthems and melodies of sweet and solemn measure, the soul of the listener goes out on these sublime and winged words:

"His praise, ye winds, that from four quarters blow,
Breathe soft or loud, and wave your tops, ye pines,
With every plant, in sign of worship wave."

It is, indeed, a magnificent tribute to the sovereign grace and virtue of our holy religion. It is a good omen, a happy auspication; and we readily accept it as among the things we could have most desired.

We are grateful for this touching, reverent, and dignified expression of a thought uppermost in the mind of every genuine man. It is confession and offering in no mean or sinister spirit. It proclaims that religion is at once the strength and ornament of our social order—its chief cornerstone, its pillar, and its Corinthian capital.

I should here, perhaps, resume my seat; but I am reminded by other symbols and allegorical representations, that we are, at last, in the "heart of the citrus belt." We have before our eyes the story of progress, from rudeness to refinement; from the imperfect conditions and appliances of a mining population to the early pledges of that prophetic period on whose threshold we stand to-night. We are passing from youth to maturity. The Pioneers are dropping away like over-ripened fruit, and the first generation of the "Sons and Daughters of the Golden West" advancing to the stations so long and worthily filled. We predicate our belief in the unexampled future of California on the advantages of soil and climate. The products here on display owe their superiority to peculiarly favorable conditions. You will bear witness that oranges, lemons, pomegranates, persimmons, grapes, figs, and prunes, walnuts, apples, and almonds, rutabagas, and potatoes flourish under similar conditions—flowering under the same sky and drawing their flavors from, substantially, the same soil. Yet it is a mistake to presume that we may plant in a gravel bed and reasonably hope for the best results. In the West Indies, where the soil is rich by nature, guano and other valuable manures are freely applied, and the harvest seldom fails to justify this provisional liberality. The soils of Joppa, Egypt, and Cashmere are opulent, watered by great rivers or fertilized by the mists of the Mediterranean, yet fail not to receive the provident atten-

tion of the orchardist and gardener. We only require what other countries have not wholly failed to supply—a fair system of remuneration. We require, too, sub-irrigation, that the tap-roots may be invited to reach down into the region of perpetual moisture. The imperative demands fully met, we may confidently expect to give the world oranges unrivaled by anything hitherto known in either hemisphere.

Climate, about which we have heard so much, is everything. It is undeniably hot where the long summer matures and ripens the citrus fruits. A visitor in one of the towns of Southern California, while mopping his brow vigorously, suggested to an enthusiastic native that it was hot. "Hot!" was the answer; "we require heat to bring our oranges to perfection." Certainly. Yet, with us, it is not a life-destroying heat. It is singularly dry, and decidedly unfavorable to those varieties of scale that require humidity as a condition to their rapid propagation and tenacious hold.

While, in New York, Chicago, and St. Louis dogs go mad in the days of August, and man himself succumbs to the nineties, we here invade the open air without precaution when the mercury rises to one hundred and ten.

A prejudice has long prevailed in Europe that even the olive will not be productive more than fifty miles from the sea. We have proved that this elegant tree will yield a bountiful harvest more than a hundred and fifty miles inland; and that it will attain the stature of a forest tree.

That malarial fevers are known wherever the climate is warm and irrigation is practiced, no one will have the hardihood to deny. Whoever heard that the growth of St. Louis or New Orleans was retarded by the presence, in profitable quantities, of calomel and quinine? I am satisfied that, especially in a country like this, the health conditions are in the hands of the people. With less of surface irrigation and an approved system of sewerage, no prevalent disorder is to be feared, while the prospect will steadily improve, until proximate perfection will be attained.

After all, the ardent summers of Central California have their correspondence in the "ethereal mildness" of its winters. Spring, with us, is so far from being the poet's dream, that it is, infallibly, a factor in the economist's calculation. As I remember, it was near the City of Nice, in 1789, an orange tree whose trunk filled the embrace of two men, their fingers touching, was killed to the roots by an unexampled visitation of cold. We know how Florida has suffered in the same unexpected way. Here the tender fruits ripen before the advent of the crisping rime: before even the trees have fairly begun to shed their autumn leaves. Rarely, even at a later period, are the pools sheeted with a transparent film of ice.

Before retiring, permit me to touch lightly, the very weighty subject of culture. I observed, in a number of the seedlings at my own door, an apparent effort to develop the mark that distinguishes a Washington Navel, as much as any peculiar mark may be said to distinguish a human being. I asked myself, whether, in that Edenic garden, whose good things are presumed to have had so wide an embrace, the Washington Navel was not the autocrat, if not, indeed, the sole original. It occurred to me that, under the superior culture of our day, the Oroville seedling may yet be made to surpass the great and pampered favorite of the connoisseurs. All this may be fanciful; but, I am content to rest the case, by referring you to the wonderful results of artificial selection. Doubt and infidelity, offspring of ignorance, are no longer in the field. Evolution is a supreme fact in the world of horticulture. Now, with such a vigorous stock, I may say, with a native product so eminently good, what may we not anticipate? Add to this a certainty that, under conditions that have done so much for the seed-

ling, choice varieties cannot fail to improve the qualities that have won their fame.

Nowhere do soil, climate, the aspects of nature, and conditions already achieved so happily unite to draw and hold an enterprising population. Those fortunate circumstances that render life beyond the mountains so great a boon are seriously affected by the rigors of winter and by desolating storms that sweep down through the summer skies. Thousands are looking in this direction, hoping to find more tranquil, if not more prosperous homes. We welcome to our favored land the men and women of toil and wholesome culture, and all who, with means and taste to cultivate and adorn the homes they purchase, are willing to transfer to us those virtues that have so long proved a blessing to the eastern portion of the continent. We would advance to meet them, and extend a Christian greeting, while—

“They reach these happy fields,
Gardens, and groves, and seats of living joy,
Where the pure ether spreads with wider sway,
And throws a purple light o’er all the plains.”

SPEECH OF E. B. PRICE, EDITOR OROVILLE “MERCURY.”

On Wednesday night of the fair E. B. Price, of the “Mercury,” spoke as follows: It is not my intention to make a speech; the immensity of the pavilion and the vast throng present render it impossible to be heard. Under the most favorable conditions, language, no matter how eloquently employed, would prove lamentably inadequate to the occasion. The vast aggregation of citrus fruits, so artistically displayed before us to-night, speak with golden tongues of the climate, soil, general productiveness, and incomparable advantages of Butte County’s citrus belt. From this eminence, surrounded as we are by a million superb oranges and other fruits tastily arranged, and decorated with the flowers and evergreens of the season, the scene is one of such transcendent beauty and grandeur that the observer is bewildered with admiration, and language seems insignificant. But, for the information of strangers present, I will state that in this great county there are about one thousand square miles of foothill territory, abundantly watered by the three branches of the Feather River, all of which is rich gravelly soil, splendidly adapted to citrus and deciduous fruits. Of this magnificent territory Oroville is the citrus and geographical center. She is the queen city of Butte County’s citrus belt, and wears a coronet of colonies, destined in a few years to become her rich, populous, and flourishing suburbs. Any ten-acre tract in this princely fruit domain, in which king orange sways his golden scepter, will abundantly support any industrious family, for an acre of oranges at ten years old will produce a net annual income of \$1,000. Thousands of acres of this land may be purchased at from \$20 to \$100 per acre, according to locality and condition. And, ladies and gentlemen, this great section of country is beyond the experimental age. Her destiny is carved in golden letters on the brow of futurity, and its brilliancy dazzles the most soaring imagination. The golden glamour of this, our second annual Citrus Fair, is but a faint glimmering of our golden future flushing with roseate hues the sweet face of Pomona as she smilingly peeps over our horizon into the promised land. The sun of prosperity has arisen upon this favored land where May flowers bloom in December, and fresh strawberries adorn our Christmas feast. There never will be as good a time as the present for the young, the old, the rich, or the poor to secure a home in this land of perennial fruits and flowers. The eyes of the emigrating world are upon

us, and in a few years more the sunny slopes and fruitful valleys of eastern Butte will be dotted with happy, prosperous homes, and the occupation of the real estate agent will be gone, for there will be no more land for sale. To those seeking homes in the most favored section of the richest county in the greatest State of the most glorious republic on earth, I say, get a slice of Butte's citrus belt, with its salubrious climate, pure mountain water, splendid health, and if their lot isn't all they desire, nothing short of Paradise will suit.

FOURTEENTH ANNUAL REVIEW

OF THE

Raisin, Dried Fruit, Prune, Almond, Walnut, Peanut, Comb and Extracted Honey Product of California, for the Year 1888.

BY GEORGE W. MEADE & Co., San Francisco.

The year 1888, now about closing, has been an auspicious one for California, and great prosperity has existed throughout the length and breadth of the State. It has not been a superficial prosperity, but one that has been founded on merit and based on a soil and climate which produce the fruits, the wines, and the grains of the earth in abundance. There is not, to-day, in all the broad United States of America, or in any section of the world, a community of people so thoroughly well-to-do and so prosperous, generally, as the people of the favored State of California. In no other country does the rich man live any better, if as well, and in no other country is the working man so well fed, so well paid, and so well clad as in this genial climate of the Golden State.

When we read of the blizzards, the cyclones, the long six months of winter which cover the Eastern States, and in which simple "existence" becomes a fight to the poorer classes, it is with pride and with pleasure that we turn to the condition of the working man of California. The opportunity which this State offers to the poorer classes of the overcrowded eastern country in making themselves comfortable and happy homes is being availed of now quite freely. No one who witnesses the wonderful immigration to this State can for a moment doubt the advantages which it offers, and, to any one having a knowledge of California, this is not at all surprising.

The products of this State are not confined to corn, nor to wheat, but they combine the products of fruits and of cereals, both of the temperate and tropic zones of almost every nation on the face of the earth, so that the hastening of the poorer classes to make their homes in this State causes no surprise. Throughout California there are still hundreds of thousands of acres of fine lands suitable for the cultivation of the raisin, the almond, the walnut, the fig, the grape, the prune, as well as peaches, pears, apricots, and in fact almost everything that can be grown anywhere. The industrious poor man who is thrifty, on ten or twelve acres can make himself a comfortable and delightful home in this favored State. He will have no long winters to look forward to; no cyclones, no blizzards, no thunder, no lightning, and no sunstrokes.

While California is now developing her natural resources faster than ever before known, what the future of this great State will be twenty-five years from now no one at this moment dares to say. With the exception of New York, that it will be the most wealthy, and perhaps the most populous State in the Union, does not admit of much question. We cannot ourselves see how it can be otherwise.

The great fruit industry, perhaps, is increasing faster than anything else; and the greater the product, the greater the demand and the greater the consumption appears to be for our California fruits in every portion of the Union and in every portion of the outside world. Hence there is no possibility of overdoing the matter.

California, with open hands, invites the thrifty, sober workingman from all portions of the world; and she invites the rich man who, with his money, seeks a delightful climate in which to pass his remaining days.

In this, our fourteenth annual review, which we have prepared with our usual care, we give the products of the State for this year, in our line, which have been carefully compiled after correspondence with our representatives in the different portions of the State; and we submit them to the public at large, with confidence in their accuracy.

THE PRODUCT OF 1888.

Raisins (20-pound boxes).....	915,000
Honey, extracted (pounds).....	3,000,000
Honey, comb (pounds).....	300,000
Beeswax (pounds).....	20,000
French prunes (pounds).....	3,000,000
German prunes (pounds).....	100,000
Apples, sun-dried (pounds).....	100,000
Peaches, sun-dried (pounds).....	2,000,000
Plums, sun-dried (pounds).....	200,000
Pears, sun-dried (pounds).....	25,000
Grapes, sun-dried (pounds).....	2,000,000
Nectarines, sun-dried (pounds).....	100,000
Apricots, sun-dried (pounds).....	100,000
Figs, sun-dried (pounds).....	75,000
Apples, evaporated (pounds).....	250,000
Apricots, bleached (pounds).....	2,500,000
Peaches, bleached, peeled (pounds).....	400,000
Peaches, bleached, unpeeled (pounds).....	2,200,000
Plums, bleached (pounds).....	40,000
Nectarines, bleached (pounds).....	60,000
Walnuts (pounds).....	1,000,000
Almonds (pounds).....	450,000

California Raisins.—We place the product of 1888 at nine hundred and fifteen thousand boxes, and as to points of production distributed as follows:

Fresno District (boxes).....	415,000
Tulare District (boxes).....	15,000
Orange and Santa Ana District (boxes).....	40,000
San Diego District (boxes).....	40,000
Woodland District (boxes).....	90,000
Riverside District and San Bernardino (boxes).....	290,000
Scattering—Yuba, Butte, Sacramento, Placer, etc. (boxes).....	25,000

The raisin campaign of 1888 has, as a whole, been a very favorable one to both producers and packers. During the most of the drying season the weather was most propitious, which enabled the growers to deliver their raisins in sweat-boxes in a proper condition for packing. The out-turn, however, was not as large as estimated earlier in the season. The Malaga crop of raisins this year was also short and likewise rain-damaged, which necessarily caused light shipments to New York from Spain, and the California raisin consequently reaped the benefit. The quality of many of the packs of California raisins, we are pleased to state, shows a great improvement on former years. In fact, some of the best known brands were equal and sold fully up to the price of the very best Malaga in New York and other eastern markets. There is and can be no question now that the California raisin has come to stay; and as the writer of this article

predicted a number of years ago, the time is now rapidly approaching when the Malaga raisin will be almost, if not entirely, driven from the American markets.

Fresno is now the great raisin-producing section of the State, and, as usual, heads the list in point of production. The Fresno section, on account of its climate and freedom from fogs, is also about a month earlier than most other sections of the State. This industry at that point is developing year by year wonderfully; and Fresno raisins, which a few years ago were unknown, are to-day in demand in the various markets of the United States. This year is also notable as having made the first shipment of raisins to Europe, the goods having been sold to London, England. While the quantity was small, it was an opening wedge, and business is likely to increase there from now on. The question is sometimes mooted that the raisin industry of California might be overdone. We do not think so. The fact of the case is, that the more the production increases the greater the demand seems to be. It is not a very long while since raisins were looked upon in the light of a very great luxury, and were only used by the rich; but to-day they are being more universally used; and the consumption is steadily increasing year by year, as the price, of necessity, naturally becomes cheaper. Now that all first class packed raisins in California are well established in the eastern markets, it is to be hoped that our packers the coming year will not pursue the senseless policy which seems to have guided them, to a large extent, in the past, but will hold their goods, which equal the Malaga, at a price which is equal to the Malaga, and not anywhere from 10 to 40 per cent under the figures obtained for the Spanish product. There is no reason now whatever for doing this. There might have been some reason when California raisins were first introduced, but that time has now gone by. A first class California raisin is equal or superior to anything that now comes from Spain; and when our packers realize this, and demand for their goods an equal price for an equal quality, they will get it; but just as long as they throw their goods away and climb over the backs of one another to see who can sell the cheapest, just so long will the eastern wholesale jobber go into New York and pay a fancy price for a Malaga London Layer, and then offer a ridiculously low price for a California London Layer, which in every respect is as good or better. The imitation of foreign wrappers is being generally discarded, and something more distinctively Californian is being used year by year, which is a very pleasing fact to note. We wish, however, that our packers would agree, which we think could easily be done at a meeting, to drop entirely the terms 3 Crown Loose, or 3 Crown London Layer, and to adopt something more distinctively Californian or American. The bulk of the pack of California raisins this year has principally gone East; and at the present time the San Francisco market is almost entirely bare of stock. Especially does this apply to London Layers; and of really choice Loose the supply is also inadequate.

The area producing fine raisins, especially in Fresno County, is still very large; and lands can be bought there for this purpose at very reasonable prices. For any man who is thrifty, and carefully looks after his own business, there can be nothing better than a good raisin vineyard. While a fortune cannot be realized and should not be expected, a good raisin vineyard will pay, if properly handled, a good, fair, and even handsome income year by year. To men of moderate means, a vineyard of twenty to forty acres is sufficient for the maintenance in comfort of an ordinary family.

We append also herewith the product of California raisins from the year 1873 up to and including the year 1888:

1873 -----	6,000 boxes.	1881 -----	90,000 boxes.
1874 -----	9,000 boxes.	1882 -----	115,000 boxes.
1875 -----	11,000 boxes.	1883 -----	140,000 boxes.
1876 -----	19,000 boxes.	1884 -----	175,000 boxes.
1877 -----	32,000 boxes.	1885 -----	500,000 boxes.
1878 -----	48,000 boxes.	1886 -----	703,000 boxes.
1879 -----	65,000 boxes.	1887 -----	800,000 boxes.
1880 -----	75,000 boxes.	1888 -----	915,000 boxes.

California Prunes.—The output of prunes this year has been abundant. In fact, we may say that the crop was very large and of very nice quality generally; but the prices realized have been much less than last year. This has been brought about partly on account of the large crop, no doubt, and partly on account of foolish consignments which have been made by many of our growers to eastern houses on commission. After one or two years' experience in this consignment business, we have no doubt our producers will realize that they can always do better by meeting the market at home, selling their goods at the best obtainable price cash, and end the transaction. While many of the parties to whom they consigned East no doubt did the best that was possible, the average commission house has but one object in view after receiving the consignment, and that is to get rid of it as soon as possible, especially if any advances have been made. This leads to constant cutting and competition between these commission houses, a consequent reduction in price, and an ultimate loss to the shipper. With the excellent quality of the California prune, with its established reputation now throughout all of the great western cities, there is no reason whatever why these goods should be sold at the ridiculous prices at which they have been sold this year in eastern cities. No change, however, can be expected as long as these consignments continue. The California prune is a better fruit in every way than the French. It is of better quality when cooked and of better flavor. It is more like a date; and the far western trade, which have used them largely in the past few years, we believe prefer them at higher prices than the imported goods. This year a French "process" was introduced here with a result that the color of the prunes so "processed" were changed so as to imitate the French goods. While, of course, the fruit looks nice, in what way it is made any better, or of any more value, it is not easy to say. The natural French prune of California as it grows and as it is cured, without any "processing," is one of the choicest and best fruits that grows on this green earth. To doctor it and "process" it to make it black like the French fruit does not add one mite to its real merit. In fact, it greatly detracts, in our opinion. It may be that some dealers will pay more for a few of these processed prunes because they imitate the French; but we do not believe that the mass of the consuming public want them in that shape, or that they will pay as much for them as they will for the natural California prune. Year by year the grading as to sizes is being improved upon; but there is still a great deal of room for improvement in this respect. A packer who grades his fruit straight 60 to 75's to the pound, finds it difficult to compete with his neighbor who puts up his fruit running 70 to 100 to the pound and stencils it on his boxes 60 to 75's to the pound. The Santa Clara Valley may still be considered the home of the California prune, although many other new sections of the State are now producing fruit of an equal quality. There is room for any amount of expanse in the prune business; and California has tens of thousands of acres adapted to its industry.

Evaporated Peeled Peaches.—The prospect of a large Delaware crop this year discouraged the California packers early in the season, and the quantity turned out was probably not one fifth of what it otherwise would have been had not the reports from the East been so unfavorable. As a rule, however, this fruit this year has run very nice in quality; and the bulk of it has already been placed East. The stock left here is a mere nothing, and a very trifling demand would clean it up in very short order. Prices that have been realized this year we do not think have been at all satisfactory to the producers, and in many instances have only shown a loss. Taking the loss in weight and other expenses into consideration, it takes at least 20 cents per pound for the dried product to pay even a fair profit to the producer. The goods have sold this year all the way from 12½ to 17 cents, according to the quality.

Evaporated Bleached Apricots.—The product of this fruit last year being large, it was thought that the crop this year would be shorter; but so many new orchards coming into bearing upset these calculations, and there was a very heavy out-turn. Besides this, as mentioned elsewhere in our Review, nearly all sun-dried apricots are now bleached. The quality of the fruit turned out this year generally has been very nice. Of course some lots are better than others. The prices last year ruled high, and purchasers generally lost money on the goods. The result was that this year the market opened dull, and has remained so ever since. This brought about a large consigning business to the East on the part of our growers here, many of whom, no doubt, now regret these shipments. Notwithstanding the tremendous increase in the apricot product of this State year by year, the demand appears to keep pace; and at reasonable prices there is no prospect whatever of overdoing the business. The demand for apricots in a canned state is very heavy, and there is never any difficulty in working off any surplus of all that may be dried at fair prices. So heavy have been the consignments East this year, that the stock of choice apricots now left here is exceedingly light; and parties who have held the goods at home are now realizing in this market prices far in advance of their neighbors who have consigned East. The sale of dried fruit as yet is principally confined to the United States; but shipments are being made from time to time to foreign markets, which generally have been duplicated. If we can once get the California apricot into Europe at a reasonable price, there will be no limit to the consumption.

Sun-dried Pears.—Only a small quantity of this fruit this year has been dried; but the demand for pears nowadays seems to be quite light, and the quantity turned out will likely be sufficient to meet the demand. The ordinary sun-dried pears are going out of favor, and the bleached pears are taking their place. We repeat our suggestion—that all sun-dried pears should be bleached.

Sun-dried Peaches.—The crop this year has been good, and of exceptionally fine quality. We are now referring to the sun-dried unbleached peaches, in sacks, principally cured by the Chinese. There have been so many of the bleached unpeeled peaches this year that the ordinary sun-dried unpeeled have been dull in sale; and there is a fairly liberal stock still remaining on hand here. Prices have sunk to such a figure that it has been difficult to determine why the goods have not gone more generally into consumption. The prices at which they can be obtained at present are certainly low enough for any one. We are of the opinion ourselves

that January and February will see an active demand for these goods, and that prices will largely advance. The bleached unpeeled peaches of California are more attractive to the eye, but are no better for ordinary consumption; and we doubt if they are as good in a sanitary point of view as the unbleached; but, nevertheless, the bleached sell anywhere from 50 to 100 per cent advance. The bulk of the bleached peaches are now out of the way; and the bulk of the unbleached are now held in pretty firm hands. With the renewed demand which we look forward to after the first of the year, we think prices will again advance. New orchards are being planted continually to the peach throughout California; but the consumption, in the way of dried and canned goods, seems to keep pace year by year with the product. It would certainly be difficult to find a finer peach anywhere than is produced in California.

Sun-dried Pitted Plums.—The low prices predicted and ruling on these goods discouraged our farmers from drying, and the output this year has been comparatively light. They are now gradually advancing somewhat in price and in demand. There is no doubt but that we shall go out long before spring with a bare market. The low price of prunes, no doubt, has had some bearing in keeping down the price of pitted plums; but they are really a different fruit entirely. One is sour, and the other is sweet.

Sun-dried Nectarines.—One of the finest fruits grown in California, and of the most delicate flavor, is the nectarine. It is unfortunate that this fruit has not been advertised as thoroughly as the apricot; and as a result it has not gone so generally into consumption. In itself, we believe it is equal or superior to the apricot; and while the demand is gradually growing, yet it is still light; and it has been found difficult to place large blocks of these goods, even though they have been offered at a price under the apricot. We hope this state of affairs will be changed in the course of a year or two, as we believe it will.

Stemless Dried Grapes.—We note a very heavy increase in the product of this fruit for the past season; and the bulk of it, in fact we might say all of it, has been already marketed. The extraordinary demand which has arisen, principally in the Western States, for California dried grapes, has been somewhat surprising to dealers on this side. There seems to have been practically no limit to the quantity which has been taken. We suppose this has been largely on account of the fruit being low-priced, and partially, no doubt, if we are correctly informed, for the reason that the fruit is being largely sold West as California currants. In any event it has proved a good thing for the growers of wine grapes in this State, as it has enabled them to do considerable better by drying their wine grapes instead of selling to the wine men. In other words, they have not been subjected to any squeezing on the part of the wine makers. The California dried grape is principally made from the Mission and Zinfandel grape, although other varieties are at times dried. While formerly more or less were shipped with the stems on, machinery has now been invented whereby the stems are taken off, in which shape they seem to be the most desirable for the eastern trade.

Sun-dried Apricots.—The output of this fruit this year has been exceedingly light. Growers generally bleach their fruit; and we are glad to see this, for the reason that the demand nowadays seems to run almost entirely on bleached fruit of any kind. Dealers appear willing to pay

well for the bleached; and hence our growers are wise in adopting the suggestion that we made several years ago, to bleach all of their fruits.

California Figs.—There has been a very fair crop of the black variety this year, which was principally sold to the coast trade. We are also pleased to make mention of the fact that some genuine White Adriatic and White Smyrna figs of California growth have made their appearance in the market this year, which in color and flavor are in every way equal to the imported figs. There are sections in this State where this white fig can be grown to perfection; especially is this the case in Fresno County, which seems to be the natural home of the white fig. We believe that this industry will grow as the raisin industry of California has grown, and that in a few years from now we shall commence to send these figs to our eastern brethren. They thought we could not do much on raisins, but we proved to the contrary; and we believe now firmly that the California white fig will, in time, be as well known in the East as the California raisin is to-day. There is nothing impossible in California.

Evaporated Apples.—On account of the discouraging outlook in the early part of the season, and the low prices prevailing in the East, the quantity put up in California this year has been quite light, and before spring we shall be obliged to draw from the East for supplies. A great improvement has been made in packing our evaporated apples; and some of our best brands now, so far as appearance is concerned, are equal to the best eastern fruit. Our trade, however, for these goods, is principally confined to the coast and Australian markets. Evaporated apples put up in the California valleys are not so tart as the eastern apple, but our foothill apples are in every way equal. The old "chestnut" of California apples not being equal to eastern apples is exploded when our foothill apples come into competition with the eastern fruit.

Bleached Unpeeled Peaches.—As will be noted by our estimate, the product this year is largely in excess of 1887. This is accounted for partly by the heavy increase in the product of peaches, as well as the fact that producers generally are year by year devoting more attention to the bleaching of their fruit than ever before. Like apricots, the prices have ruled lower this year, and the result has been that large quantities have been consigned East, and in most cases sold at less than the owner could have realized at home. These consignments have pretty well cleaned out the stock here of choice goods; and now anything that is nice is bringing pretty good prices in this market. The demand for these goods is constantly increasing; and, in fact, we think they can now be found in nearly all the large markets of the United States. Being a large and meaty fruit, the California peach is the finest put up anywhere. Their only competitors are the Delaware peaches; but these do not begin, in quality nor in size, to compare on the average with the California goods, though when packed in boxes more care is used, perhaps, than is customary with our California packers. It is likely that we shall go out of the year with a pretty bare market. The out-turn of these goods will increase in quantity year by year.

California Walnuts.—The product this year does not vary very much from that of 1887. Prices, however, are considerably lower than last year; and while the quality of our best California walnut is unquestionably equal to the imported, the demand during this season has been sluggish. This

is something that may be expected in some years, and our producers should find therein no reason to complain. The California walnut has come to stay. It is a better nut, when freshness is considered, than the best imported; and the far western trade, we think, prefer them to the imported goods. The walnut industry has not grown as rapidly as some of our California fruit industries, but there is a very wide field. Land for growing them is abundant at reasonable prices; and we see no reason why California, within the next decade, should not supply the United States with all the walnuts they want. The best walnuts—or the most properly prepared for market—come from Los Nietos, in Southern California. Santa Barbara also produced a fine nut; but they have not taken as yet the same pains in grading or bleaching them as their friends in Los Nietos have.

California Almonds.—The market this year has been dull and slow for our almonds. The crop was not as large as was expected; but, notwithstanding this fact, the demand from the East, where the bulk of them are placed, has been sluggish in the extreme. The soft-shelled almond of California is a fine nut. It is not as large as the Tarragona imported almond, but it is of softer shell, and for the consumer is the cheapest and best nut to buy. Tarragona almonds are large, coarse, thick-shelled nuts; and the purchaser pays his money for a pretty good percentage of shells. As the California becomes better known, we have no doubt whatever that they will drive out the imported goods. The imported almonds still have a pretty strong hold on the far eastern trade; but the California soft-shelled almonds are generally called for by the far western trade. Like the walnut, the almond industry has not advanced as rapidly as it should; still a great many new orchards are being planted out, and take it one year with another it is a good paying industry. The area that can be devoted to almond raising in California is very large; and lands for this purpose can be bought at very reasonable prices.

Extracted Honey.—The output this season fell a good deal short of what was anticipated, which, consequently, made prices much better. The quality, also, is good, and the color especially is much finer; and we have had more extra white honey this year than we have seen for a long time. The honey of California is beyond question the finest produced in the world. Another thing in its favor is that the honey shipped from California is, as a rule, pure. Where adulterations have been indulged in, it has generally been done after the honey leaves this State. There is in fact little or nothing that could be used here for adulterating the honey but that is worth as much as the honey itself. We notice that our suggestion in regard to using new tins and cases is being more generally adopted, and this is to the benefit of the producer. Honey which is put up in that shape will generally bring enough more to pay for the extra cost; and it looks much neater and more tasty in that shape. It is to be deplored that the consumption of pure honey throughout the country is not larger than it now is. The article is cheap enough for any one. It is a wholesome article of food, and can take the place of butter, as well as being used in various other ways on the table. Yet, notwithstanding this, it is only right to say that the sale of honey has been languishing for a number of years. Just why this is, it is very difficult to tell. Pure honey is an article that ought to be found in every household in the country.

California Comb Honey.—The output of this, like extracted, has been comparatively light this year; and good prices for choice goods have been

pretty readily obtained. We repeat our suggestion of last year, that the sale of California honey, if packed in one-pound frames, could be very largely increased. Eastern and western dealers are accustomed almost entirely to one-pound frames; and if our honey producers here would change their style of packing and putting up their honey in one-pound frames, we think they would find almost immediately the demand increase two or three times what they are now selling. On some parts of this coast, where dealers generally do not pay much attention to small items, the two-pound frame is all right; but when we come into competition with the eastern honey men, we ought to have our goods in one-pound frames. The stock of both comb and extracted honey here for this season of the year is comparatively light. Large shipments of extracted have been made to Europe on direct orders; and the comb has been principally placed here and in eastern cities. We think we shall go into the new crop with a bare market.

Sun-dried Apples.—The evaporated apples have now almost entirely taken the place of the sun-dried in California. What few are now sun-dried are principally the work of Chinamen, but even this class of labor is rapidly abandoning the business. We are very glad to see this, as the evaporated apples are not only cleaner and better in every way, but are really cheaper in price considering their superiority and the fact that in table use they go a good deal further than the sun-dried, and are consequently in the long run the cheapest fruit to buy. The day of the sun-dried quarter and sliced apple we believe has gone by.

CONCLUSION.

In submitting this, our fourteenth annual review, we desire to again return our thanks to our many friends in various portions of the State, who have so kindly assisted us in preparing these statistics. While the getting up of these annual reviews entails a good deal more of work and expense than many people would imagine, we always undertake it with a great deal of pleasure, hoping that it may benefit directly or indirectly the great fruit industry of California, as well as the State of California at large.

We are also glad to say that it is now looked upon as an authority in the lines which it covers, and as such is distributed and published generally throughout the United States and in various portions of the world.

REPORT ON CATTLE DISEASES PREVALENT IN CALIFORNIA.

By DR. THOS. BOWHILL, M.R.C.V.S.

SAN FRANCISCO, December 17, 1888.

The Secretary State Board of Agriculture, Sacramento, California:

In compliance with instructions from Dr. D. E. Salmon, Chief of the Bureau of Animal Industry, I proceeded to investigate the outbreak of disease among the cattle of San Diego County, and have the honor to submit the following results of my investigation:

Arriving at San Diego I found that my written orders, etc., from Washington had not yet arrived, so I thought it the better plan to inform myself of the following points:

First—The direction in which the said disease was supposed to exist.

Second—The ranches on which said cattle were supposed to be dying.

Third—The health and condition of cattle, etc., in San Diego City and its surroundings.

In the course of my inquiries I came in contact with the following gentlemen, and elicited the appended information: The first gentleman I interviewed was Mr. George Selwyn, of the firm of Selwyn & Alison, wholesale butchers. He said: "I have been twenty-three years in this county, and have known of the existence of disease in this county for the past sixteen years, being worse in the last three or four years in the neighborhood of San Diego. Some seasons the disease predominates in one locality. This year (1888) it has manifested itself principally at Warner's Ranch, which is owned by ex-Governor Downey, of California." He also stated that cattle brought from the mountains in the interior of San Diego County during the dry season of the year to San Diego City or any part of the coast, are, from ten to fifteen days after arrival, subject to disease. The disease is of frequent occurrence, and the cattle are slaughtered and used for consumption. He next described the symptoms of disease and the post-mortem lesions, both of which correspond to those of anthrax and southern fever, more particularly the latter.

I also obtained the following information about the hogs, viz.: that a disease made its appearance about two years ago in the pens around the slaughter houses, and although the disease has not been so marked, yet the mortality has been slightly decreased during the last six months.

In 1887 Mr. Selwyn said the mortality reached the enormous number of one thousand head. I asked him if the disease existed at the present moment. He said that he suspected it did. We then drove out to some hog pens near his slaughter house, and I found some hogs running round loose which exhibited symptoms of the last stages of swine plague, and others in pens with the characteristic cough. At my request Mr. Selwyn slaughtered one and I made an autopsy, finding the post-mortem lesions—those of swine plague. I recommended that he (Mr. Selwyn) should destroy the whole of the hogs, which belonged to a man to whom he rented the premises. Mr. Selwyn further remarked that big jaw, or actinomy-

cosis, was occasionally seen, and that black leg, or symptomatic anthrax, was very prevalent a few years ago, but of late years it has been on the decline. Scab in sheep is very prevalent. Mr. Selwyn stated his annual loss from cattle disease was \$500.

The next gentleman I interviewed was Mr. Hardy, wholesale butcher, San Diego. He informed me that he shipped cattle in April and May, 1888, to San Diego, and pastured them in El Cajon Valley, fifteen miles from San Diego. The cattle appeared healthy until the month of August, when about 2 per cent died. I am informed that the remainder of those cattle were slaughtered in San Diego. Mr. Hardy also informed me that Mr. Stratton's cattle, also in El Cajon Valley, began to die when he sold the remainder to him (Mr. Hardy), who found on slaughtering them that two were diseased, the spleens being three times their natural size and of a dark color on section. The livers were of a brick-red color and covered with yellow streaks like straws laid across. The kidneys were also diseased, and the flesh, when dressed, was of a bright, yellowish-red color. Mr. Hardy further stated that at least 50 per cent of the cattle within from ten to thirty miles from the coast in San Diego County take this sickness and about 20 per cent of the sick animals die, and appear to be worse between the months of July and December. When asked about the swine plague, Mr. Hardy corroborated Mr. Selwyn's statement, saying that he himself, about eighteen months ago, lost between five and six hundred hogs, which he valued at \$2,500.

The next gentleman was a Mr. Cassidy. He stated that he sold his ranch in 1887, but during the preceding ten years his average mortality was about 20 per cent, the money value of which was about \$1,000 per annum. He also mentioned the fact that one year his cattle died and his neighbors did not, although they were only separated by a wire fence; the following year his neighbors' died and his did not. Mr. Cassidy also observed the fact that cattle brought from the north to this county do not thrive, but that calves and yearlings thrive and did well, also that mountain cattle brought to the coast die, but coast cattle taken to the mountains do well.

Mr. Thomas Alvarado was next interviewed, from Rancho Monserrato. He noticed disease on his ranch about ten years ago. In his opinion it was brought in by cattle from Lower California and Mexico. He lost about sixty head last year, and his neighbor, H. H. Green, lost over one hundred head; the cause of death, in his opinion, being southern fever. He first noticed this disease about eighteen years ago, directly after Judge Weatherby brought in two hundred cows from Arizona and gave them to C. Thomas, on shares, at the Hermit Valley. His opinion is that the disease originated from said importation. His brother, D. Alvarado, of Cuero, lost over sixty head last year, and considered his losses due to southern fever.

My written instructions having arrived, I left next day for Warner's Ranch. I may here state that I had the greatest difficulty in getting my questions answered, and a good many of the answers were calculated to mislead and perplex me. It was almost impossible in many instances to obtain dates. On arrival at El Cajon I heard that at present there were no deaths or sickness among the cattle. On the Santa Maria Ranch I found they had lost a few head, and here I interviewed a Mr. Johnstone, who lives seven miles above this ranch. He informed me that he had, in 1883, lost twenty head of cattle out of a total of sixty head, which loss he attributed to southern fever.

I arrived at Balena, and left next morning for Warner's Ranch, and on my way I passed through the Santa Ysabel Ranch, which adjoins Warner's. I found they had lost nine or ten head of yearlings with black leg. At Warner's Ranch I found out Mr. Linton, the manager, was not at home, having gone to Julien, intending to continue his journey next day to San Diego. In course of conversation with one of his men I was informed that they had lost over one hundred head, and that they had ceased dying a few days before my arrival, and shortly after the first frost, therefore I could not make an autopsy. I decided to go to Julien and see the manager and personally interview him. Mr. Linton confirmed the statements made by the man seen in the morning; he also added that he purchased some cattle from the San Felipe Ranch which adjoins the Warner Ranch. A little later ex-Governor Downey, of California, and owner of the Warner Ranch, bought four hundred Chihuahua steers shipped from Mexico to Colton by a man named Strausenbach; and said cattle were delivered by the aforesaid Strausenbach on the Warner Ranch; a short time after their arrival the natives began to die. Mr. Linton ascribed their deaths as due to the arrival of the San Felipe cattle. I found out, however, that the other half of the San Felipe cattle were bought by Joseph Marks, of Julien, and removed to San Bernardino, remained perfectly healthy, and as yet caused no disease among the cattle at San Bernardino, whereas some of the San Felipe cattle on the Warner Ranch died, as well as some of the Warner Ranch stock shortly after the advent of the four hundred steers from Colton, none of which died. Mr. Linton said the fattest and best animals went first, whilst others lingered for days, some recovering. On opening some of the dead cattle he found the spleens enormously enlarged, the livers also, and of a brick-red color; the gall-bladders enormously distended and full of dark, green inspissated bile; he said there was absence of any dark stain to the flesh, which was, if anything, brighter than usual. The Indians and half breeds devoured the flesh of all that died, without as yet having experienced any bad effects, which, in my opinion, could scarcely be possible had it been anthrax, as Mr. Linton supposed. Mr. Linton owned to having lost one hundred head, but I am inclined to think he underestimated his loss, as his nephew informed Mr. Bishop, his neighbor, that they had sold one hundred and fifty hides, and that others were missing—placing the loss in his opinion between one hundred and eighty and one hundred and ninety head.

From Julien I went to Cuyamaca (Governor Waterman's ranch), and on arrival was informed that a valuable bull had died that morning. It was buried. When I had it disinterred and made an autopsy, I found the post-mortem lesions that of southern or Texas fever. I made a microscopical examination of the liver and spleen by means of cover-glass specimens. The microscopical examination confirmed the microscopical diagnosis. The foreman, Mr. B. W. Carey, said: "We have lost in all twenty-one head. We shipped cattle from the Penasquitos Ranch, on the coast, to San Bernardino, by car, in April, 1888. They remained there three months. In July, 1888, we reshipped them with others back to the Penasquitos Ranch. In about two weeks after their arrival two deaths occurred. We then started the cattle the next day for the Cuyamaca Ranch, going through by way of Poway and El Cajon. On arrival at Cuyamaca three died the same night; then two died. They all exhibited the same symptoms." Mr. Stratton's cattle, pastured in the El Cajon Valley, commenced to die after Governor Waterman's passed through. I must refer you back to Mr. Hardy's testimony, in which he says he bought Mr. Stratton's cattle, and on slaughtering them found two showing the post-mortem lesions of south-

ern fever; and also that his own cattle pasturing in the El Cajon commenced dying in August. Now, the Governor's cattle passed in the end of July. It would appear from this evidence, if correct, that the Governor's cattle were the means of causing the infection at Poway and El Cajon, and that they, without a doubt, carried the infection to the bull that died at Cuyamaca.

In connection with those cattle I must state that yearly deaths take place at the Penasquitos Ranch. It is a peculiar fact that none of the cattle taken to San Bernardino from Penasquitos died, but that the deaths took place two weeks after their return to Penasquitos with other cattle, which I was informed by Governor Waterman's son came from their San Bernardino dairy. It is well known that deaths have occurred close to Colton, which is two miles from San Bernardino, from southern fever, and it may be that the Governor's cattle crossed a trail and became infected or caught the contagion on the cars on the return to Penasquitos. But these being native cattle would not possibly infect Hardy's and Stratton's unless some southern cattle were mixed in the herd. It is also a fact that the bull that died at Cuyamaca was raised on the Cuyamaca Ranch, and that no deaths occurred until the arrival of the herd from Penasquitos. I am informed that the original stock of those two ranches were brought in by Colonel Taylor from New Mexico, Iowa, and Kansas. I also examined the remainder of the herd and found only one sick cow, which was killed, and the post-mortem revealed a case of tuberculosis.

Leaving Cuyamaca I commenced to trace up the infection on Warner's Ranch, and on my way passed through the San Felipe Ranch, which adjoins Warner's, and found they had lost five head of cattle, and in one day thirty sheep, which the owner claimed died from the eating of a certain weed. He also informed me that black leg was of annual occurrence on his ranch.

Leaving here I passed through Warner's for the second time, and went through the center of the four hundred Chihuahua steers, all of which seemed in good condition, as were also most of the natives, no more deaths having occurred since my first visit. Taking up the trail of the Chihuahua steers, the first place I came to was Oak Grove, and Mr. Studebaker informed me that those Chihuahua steers passed through his place, and up to the present no deaths had occurred, but one of his cows was sick, exhibiting a prominent symptom of southern fever. I informed him what to give her, one of the Warner steers having mixed with his herd. From here I proceeded to Temecula, and found that numerous cattle had died around the town. I interviewed the following gentlemen: Mr. E. J. Tolan, who stated that he lost one heifer three weeks after the Warner steers came through; two years ago he lost thirteen on the same trail. Mr. Nichols has lost ten or twelve head this year; Philip Cusis, five; Hutchinson, twenty, and most of his herd has been sick. He opened some of those that died, and found the gall-bladders enormously distended and full of dark, inspissated bile, and the spleens also enormously enlarged. All those he opened presented similar appearances. The first animal that died was his best and fattest cow; it occurred about the middle of July, 1888. Previous to that some southern steers were seen in the hills, and two of these mixed with his herd, and were with them for several days. Mr. Linton, manager of Warner's Ranch, informed Mr. Hutchinson that those Chihuahua steers were scattered from Colton to his ranch, some thirty or forty being missing. Mr. Gregor, of Nigger Cañon, lost ten head, some of those steers also having appeared around his place. Mr. Brady, three miles from Temecula, lost fifteen head. He said that Warner's steers came

through in August, and that his cattle died before they came through; and, as Mr. Hutchinson's boys informed me they saw steers around the hills in the vicinity of Temecula as early as the sixth of July, they could not be stragglers from those that went through in August.

I now proceeded to the Santa Marguerita Ranch, when Mr. O'Neil informed me, concerning the Warner steers, that Mr. Strausenbach brought them from Chihuahua and pastured them on the Castile Ranch, fifteen miles from Colton, and sold them to ex-Governor Downey; he went to see these cattle, but declined to purchase them. On the twelfth of July, I delivered cattle to Hardy, of San Diego, and he informed me that he had seen stragglers (southern cattle) on the hills around Temecula; this seems to coincide with the date of the death of Mr. Hutchinson's first cow. He also said that Colonel Taylor brought cattle from Texas to Cuyamaca and Penasquitos two years ago, and some of these, which were of a high grade, died, the Texans, in his opinion, infecting them; also that they are killing Texan and New Mexican cattle continually in San Bernardino City. He stated his own losses had been about ten to fifteen head this fall, and attributed the same to cinchona poisoning and ticks. From here I went to San Juan Capistrano, and interviewed Mr. Marcus Foster; he said that Mr. O'Neil brought in cattle from Texas on to the Santa Marguerita Ranch, which adjoins his, and that said cattle broke down the fences and mixed with his, and he lost two head. Next year the same thing occurred, and they mixed with others he brought from Arizona, and he lost from eight hundred to one thousand head; this year, 1888, he lost about one hundred head. I made an autopsy on this ranch, and found the cause of death to be southern fever. He further stated all the ranches below have been affected in a similar manner, and as we never had the disease before, it must have been brought in to the ranch.

I went to Colton, where the Warner steers were unshipped. I interviewed Mr. Castile, owner of the Castile Ranch. He said: "Mr. Strausenbach brought four hundred steers from Chihuahua to my ranch, fifteen miles from here, in June, 1888, and pastured them on my ranch for two months, and then sold them to ex-Governor Downey. His son helped to deliver them on to Warner's Ranch, and denied losing any on the way. In September, 1887, I lost fifty-six dairy cows worth \$3,000, and attribute this loss to cattle being driven across my ranch and affecting it. This year I lost none."

I now proceeded to the Southern Pacific Office at Colton, and found the shipment of cattle to this point, as follows:

First—From Benson, Arizona, arrived May third, for Marcus Foster, San Juan Capistrano.

Second—From Tucson, Arizona, arrived April sixth, also for Marcus Foster.

Third—March thirteenth, Mr. Strausenbach shipped one hundred and thirteen head of cattle, but they were slaughtered in Colton and San Bernardino.

I now went to the Santa Fe office at Colton and found that Strausenbach shipped four hundred head of Chihuahua cattle into Colton on June 6, 1888, and sent them down to the Castile Ranch, as already stated. Having now obtained all the evidence, and with due regard to conflicting statements, no doubt purposely made in a great many cases, I drew the following conclusions concerning the outbreak of southern fever in San Diego County: That southern cattle have been shipped into Colton, and there traveled by the following trails: that going to Warner's Ranch, and that going to Capistrano, and also by O'Neil's trail from San Geronimo to

Rancho Santa Marguerita, and these cattle have infected the trails, and by that means the native cattle.

At the request of Dr. Orme, of Los Angeles, I made a short inspection in that city, and found it far from being in a satisfactory condition. I heard complaints from some of the veterinary surgeons that glandered horses were not destroyed as they should be. In company with Dr. Whittlery, V.S., I visited Mr. W. W. Cato, on Anderson Street, Los Angeles, and found he had lost three cows within one week, from what the doctor considers southern fever, and in which I agree with him when the following facts are taken into consideration:

First—Scenton Bros. of the Orleans market ship in southern cattle.

Second—Said cattle are unloaded at the railway yards, and driven ten miles to Scenton Bros.' yards, by way of the river bottom.

Third—Mr. W. W. Cato's cows grazed right on this bottom where these cattle were driven.

In view of these facts, and the scattered condition of the slaughter houses in Los Angeles, and to prevent such contagion, the animals ought to be unloaded in the slaughter yards, and said slaughter houses should be all in one place, and not scattered, as is the case in Los Angeles and San Diego. San Diego has the better facilities, as all the offal can be taken out to sea and dumped, by means of a lighter.

I now proceeded to Hanford, Tulare County, and on arrival I interviewed Dr. J. A. Davidson, M.D. He said: "I examined some cattle two and a half miles from here that were brought from Salinas Valley and put in a field of alfalfa, and about thirty days ago they commenced dying, after being about three weeks on the alfalfa." I next interviewed Mr. Motherall, and he said the cattle came from the Salinas Valley, and in two weeks after arrival began to die. On their way they passed through Polly & Heilbron's ranch, where cattle have been dying this year in great numbers; but when frost came the mortality ceased. He said: "I consider the disease to be southern fever, as it was identical in symptoms, course, and post-mortem lesions with what I have seen in Florida and Mississippi."

I now went to Mr. Sanborn's, four miles from the city, and found E. J. Tilton had lost nineteen head this year (1888); last year (1887), sixteen head. He usually carries about forty head. This year they died about the first of September, on the advent of some cattle from the Coast Range in the month of August. The post-mortem lesions described by Mr. Tilton correspond to those of southern fever. I now went to Mr. Sanborn's field and made an autopsy on a cow which was killed in the morning, and found nothing to indicate the acute stage of southern fever, but from the condition of the liver and gall-bladder, it was either commencing, or else recovering from it. In the lungs I found the bronchial tubes full of the *strongylus micrurus*, which causes parasitic bronchitis; and from the amount of animals coughing in the herd, I had no doubt that others were affected, and told the boys what to give them. I now made an autopsy on a calf in the same field, which had been dead two days, but as the weather was cool I was able to get the lesions well defined, except where the post-mortem staining was on the underside from gravitation. I found the lesions to be those of southern fever. I also made a microscopical examination of the spleen and liver by means of cover-glass specimens, but could not find any signs of the bacillus of anthrax. Mr. Sanborn said: "I sold my hay to Polly, Heilbron & Co., to be fed on my ranch, and they brought one thousand four hundred head of cattle from their place, and about three days after arrival they commenced to die, and about four hundred and fifty head had died on the ranch before they left." From the evidence procured at

Hanford, it can be said that Polly & Heilbron's ranch was affected, and that the cattle reported dying by Dr. Davidson, according to Mr. Motherall, crossed this ranch, and in about three weeks commenced dying from southern fever. And again, the Polly & Heilbron cattle brought to Mr. Sanborn's died, and the post-mortem lesions are identical with those of southern fever, as far as a post-mortem made two days after death can be relied on. In view of this testimony I can place the contagion among those cattle from Salinas, in two places. First—Before leaving the Salinas Valley, which I found to be infected in October, 1888. Second—On the Polly & Heilbron Grant, where the cattle have been dying this fall; and from the post-mortem made at Sanborn's on the calf, I have only one opinion to advance, and that is, the cause of death was southern fever, and such being the case, was it not possible for the steers that came from Salinas to become infected when crossing that ranch.

As Mr. Biddle, of Hanford, informed me that the deaths around the county had ceased, I could do nothing more, and left for San Francisco.

On the fourteenth of December, Dr. Spencer reported the following: Mr. Granger, residing in the southern part of Santa Clara County, reported the death of two young horses in one week. The deaths were very sudden, and the diagnosis from the autopsies was anthrax. The history of the cases is as follows: Hay was procured from Mr. O'Toole's ranch, where anthrax is rumored to exist, as Sargent's cattle died there of that disease this fall, and on opening the bales of hay, many of the same were found to contain parts of dead animals, and presumed to be parts of animals that had died of anthrax; and in this manner Dr. Spencer decided the contagion was carried to Mr. Granger's horses. The doctor also said the county authorities failed to see the necessity of burning over the fields and carcasses on O'Toole's ranch, when the Sargent cattle were known to die of anthrax.

Respectfully submitted.

THOS. BOWHILL, M.R.C.V.S.,
Special Agent Bureau of Animal Industry.

WHEAT, BARLEY, FLOUR, ETC.

WHEAT AND FLOUR.

The year 1888 opened auspiciously for our farmers, the rainfall for the month of January having been ample for all requirements in all sections of the State. An amount of land considerably above the average, and estimated at three million two hundred and fifty thousand acres, was seeded to wheat. Influenced by brilliant crop prospects, with dull and drooping markets abroad, prices in California steadily declined for the first three months in the year. February passed, giving us a few showers; March passed, giving a fair amount of rain, and on the first of April the crop, while somewhat late, gave promise of an abundant harvest. The month of April left a record of cloudless skies, hot weather, and parching north winds that swept over the State, doing irreparable damage to the young grain. The acreage destroyed by the drought of this month amounted to very nearly one quarter of the total acreage seeded. About the middle of April, with crop prospects growing more and more gloomy, prices of wheat suddenly stiffened, and, aided by better markets abroad, shot rapidly upwards, the highest prices of the spring months being realized about the middle of May. Then, with a brighter outlook for the coming harvest, came a sudden reaction. June passed in a quiet and uneventful manner. Then began a bull movement that has had no parallel for many years. July scored an advance of 10 cents per cental, and in August prices went bounding upwards, keeping pace with the excited markets of England and France. During September the fluctuations were rapid and violent. After the first of October values steadily declined, the close of the year finding prices but little higher than they were on July first.

The estimated outcome of the crop of wheat of 1888 is about twenty-seven million seven hundred and fifty thousand bushels, as against a yield of twenty-eight million eight hundred and sixty thousand bushels in 1887.

The year 1888 can be considered as fairly prosperous for our millers, although our trade with China and Japan has been quite seriously cut into by Oregon. As nearly as can be estimated, two million barrels of flour were turned out by the mills of this State during the year. The exports show a slight increase over those of 1887, but are still considerably below the exports of 1886.

Tables will be found farther on giving the highest, lowest, and average prices during each month of the year for No. 1 white wheat spot, and also tables giving the highest and lowest prices of No. 1 feed barley during each month of the various options dealt in at the San Francisco Produce Exchange Call Board Association.

BARLEY.

With the exception of a rapid advance during the month of April of 25 cents a cental, caused by the drought of that month, prices of feed barley fluctuated within a very narrow range throughout the year.

Outside of the above spurt there is nothing of special moment to chronicle, except that the exports by sea and rail together amounted to one million seven hundred and forty-one thousand one hundred and forty-eight cents, an amount considerably in excess of the shipments of the previous twelve months, and larger than the record of any previous year. A flattering increase in our exports to the United Kingdom must especially be noted.

As would naturally be expected with large exports, trade in brewing descriptions and chevalier has at times been very active; the range of the bulk of the shipments being from 90 cents to \$1 02½ per cental for No. 1 brewing, and from \$1 40 to \$1 60 per cental for No. 1 chevalier.

The first of January, 1888, found the heaviest stock of barley ever carried in the State, and this has been a constant drag on the markets. The crop of 1888 is estimated as somewhat less than that of 1887.

RECEIPTS AT SAN FRANCISCO, 1888, FROM ALL SOURCES.

MONTH.	Flour— Quarter Sacks.	Wheat— Centals.	Barley— Centals.	Oats— Centals.	Corn— Centals.	Rye— Centals.
January	377,110	731,940	120,997	46,778	21,193	1,869
February	409,516	1,139,251	146,154	28,675	20,316	1,444
March	354,690	1,267,888	130,296	51,109	18,940	4,042
April	371,439	324,112	84,697	39,147	25,936	546
May	292,103	429,448	200,907	21,845	22,491	1,093
June	473,953	398,729	116,632	40,229	18,934	2,580
July	320,212	834,428	141,987	34,273	13,411	1,692
August	411,053	1,947,297	354,861	52,842	1,979	2,276
September	173,483	1,879,526	477,184	62,013	9,731	4,924
October	348,919	1,579,272	644,084	69,442	22,123	3,541
November	421,591	1,221,497	226,030	65,059	18,987	1,332
December	400,351	1,163,840	148,802	98,117	27,057	3,204
Totals, 1888	4,354,420	12,917,228	2,792,631	609,529	221,098	28,543
Totals, 1887	3,600,345	9,602,631	2,055,366	414,812	281,600	32,277
Totals, 1886	4,885,772	16,527,503	2,184,560	508,717	218,100	26,275

MONTH.	Potatoes— Sacks.	Hay— Tons.	Flaxseed— Sacks.	Mustard Seed— Sacks.	Wool— Bales.	Beans— Sacks.	Hops— Bales.
January	112,887	7,164	8,218	38	1,064	12,786	475
February	126,439	9,415	7,206	865	614	14,104	249
March	107,544	9,245	12,793	1,802	1,523	15,404	300
April	71,659	7,486	4,318	808	13,638	8,868	582
May	70,773	8,848	3,173	1,093	16,690	9,129	279
June	96,534	12,942	1,856	216	12,200	6,950	305
July	110,403	15,235	831	1,238	14,071	2,725	339
August	88,753	17,085	1,325	1,855	6,825	6,055	812
September	86,626	15,269	439	5,040	9,543	22,176	3,277
October	132,678	14,290	19,707	7,752	17,225	75,867	9,585
November	115,572	6,216	15,627	4,136	7,133	63,431	1,033
December	119,562	4,506	20,412	1,265	4,782	31,562	716
Totals, 1888	1,239,430	127,701	95,905	26,108	105,338	269,057	17,952
Totals, 1887	961,200	117,360	58,193	37,734	110,769	423,530	-----
Totals, 1886	1,079,593	99,442	88,704	43,828	114,098	361,320	-----

Report of flour and grain remaining in the State of California on December 1, 1888:

	Flour— Barrels.	Wheat— Centals.	Barley— Centals.	Oats— Centals.	Beans— Sacks.	Corn— Centals.	Rye— Ctls.
San Francisco and Oakland Wharf, including grain afloat in harbor	27,608	1,067,340	986,370	73,490	71,440	8,967	600
Marin, Sonoma, Lake, Mendocino, and Humboldt Counties	3,015	98,400	42,100	28,650	170	2,350	50
Napa, Solano, Yolo, and Colusa Counties	11,598	2,675,410	411,000	60	1,275	100	-----
Sacramento, Yuba, Sutter, Butte, Tehama, Placer, and Amador Counties	24,200	1,618,600	304,950	750	2,300	8,550	-----
Contra Costa and Alameda Co.'s	600	2,338,740	367,400	4,200	250	2,000	-----
San Joaquin, Stanislaus, Merced, Fresno, Tulare, and Kern Counties	17,575	2,253,930	314,650	-----	1,500	4,100	4,050
San Mateo, Santa Clara, San Benito, Santa Cruz, and Monterey Counties	7,045	434,210	1,034,080	11,500	8,485	1,680	1,240
San Luis Obispo, Santa Barbara, Ventura, Los Angeles, San Bernardino, and San Diego Co.'s ..	4,265	333,000	626,500	1,525	149,900	239,000	1,100
Totals	95,906	10,819,630	4,087,050	120,175	235,320	266,747	7,040

Comparative statement:

	Flour— Barrels.	Wheat— Centals.	Barley— Centals.	Oats— Centals.	Beans— Sacks.	Corn— Centals.	Rye— Centals.
July 1, 1888	71,920	3,881,960	2,063,450	62,095	33,675	82,200	800
January 1, 1888	59,979	9,730,060	4,522,990	65,380	109,925	121,300	4,350
July 1, 1887	50,275	2,790,400	798,500	42,400	74,405	72,330	1,350
January 1, 1887	89,605	7,812,850	2,590,250	47,400	243,550	136,650	44,650
July 1, 1886	102,325	1,252,600	114,850	31,150	103,700	27,625	1,080
October 10, 1885	107,180	13,768,539	1,620,500	-----	-----	-----	-----
July 1, 1885	70,800	5,382,900	608,150	107,440	81,280	72,100	32,875
January 1, 1885	187,830	15,852,210	1,933,250	304,710	168,110	146,430	61,300
July 1, 1884	112,000	664,050	640,350	58,450	44,175	16,110	30,100
January 1, 1884	177,280	6,735,720	2,434,150	149,330	53,050	91,220	58,910
July 1, 1883	77,000	979,500	820,500	10,300	56,060	57,420	8,125
January 1, 1883	158,893	8,381,879	1,941,466	118,650	94,830	90,865	23,665
July 1, 1882	119,324	2,822,903	162,416	21,305	48,708	61,597	3,021
January 1, 1882	123,151	15,191,020	823,322	85,143	95,843	157,716	32,059
July 1, 1881	135,592	12,444,278	595,028	15,744	70,780	94,210	3,820
January 1, 1881	78,253	19,805,466	1,651,787	95,220	113,708	228,037	17,742
July 1, 1880	30,934	323,821	908,294	18,357	52,217	88,572	5,989
January 1, 1880	83,638	4,096,895	2,013,930	112,351	48,904	129,715	38,712
July 1, 1879	37,786	593,251	806,565	26,484	-----	148,002	22,237
January 1, 1879	75,130	5,781,168	2,207,142	137,042	-----	233,534	64,384
July 1, 1878	20,231	284,424	147,598	29,564	-----	11,066	280
January 1, 1878	57,187	2,646,811	882,046	104,998	-----	110,434	3,901

Exports from the State of California by rail for the year 1888:

MONTH.	Barley— Centals.	Beans— Centals.
January	107,820	4,208
February	157,351	10,176
March	120,516	6,994
April	9,454	1,087
May		
June		
July		671
August		857
September	26,317	4,622
October	146,923	33,154
November	86,340	23,532
December	57,391	18,840
Totals, 1888	712,112	104,141
Totals, 1887	78,458	220,410
Totals, 1886	245,694	

Export of flour and grain during year 1888—from San Francisco, by sea:

MONTH.	Flour— Barrels.	Wheat— Centals.	Barley— Centals.	Beans— Centals.
January	69,114	694,382	37,754	3,523
February	71,724	917,609	43,514	5,912
March	103,612	1,016,559	67,508	3,603
April	51,793	633,233	12,972	929
May	35,741	326,456	21,015	1,694
June	118,253	321,079	16,876	756
July	49,303	741,532	11,591	2,082
August	75,298	1,433,754	103,762	1,581
September	23,020	1,811,841	62,558	1,912
October	48,183	1,406,984	315,154	1,899
November	93,589	1,128,974	226,451	1,774
December	68,809	1,280,858	109,881	2,885
Totals, 1888	808,439	11,708,261	1,029,036	28,550
Totals, 1887	788,180	9,140,689	416,583	*180,448
Totals, 1886	1,104,395	15,874,268	760,606	

* Sacks.

Stock of grain in "regular" warehouses, in tons:

MONTH.	Wheat.	Barley.	Oats.	Corn.
January 1, 1888	172,083	38,277	1,096	487
February 1, 1888	138,290	35,342	2,001	473
March 1, 1888	106,074	29,720	1,852	378
April 1, 1888	90,380	25,656	2,103	416
May 1, 1888	90,893	22,309	2,303	510
June 1, 1888	83,331	24,883	1,461	600
July 1, 1888	76,115	23,696	2,209	787
August 1, 1888	69,386	23,651	1,822	887
September 1, 1888	110,168	29,288	2,099	519
October 1, 1888	129,347	39,335	2,853	599
November 1, 1888	140,394	47,613	3,251	808
December 1, 1888	143,819	47,256	3,249	210
January 1, 1889	122,445	43,967	4,421	777

RAINFALL AND WHEAT.

The following table shows the rainfall at San Francisco for a series of years, and the crop of wheat raised:

SEASON.	Rainfall— Inches.	Crop.	Centals.
1877-78	31.12	1878	22,825,000
1878-79	24.56	1879	19,801,000
1879-80	26.38	1880	34,150,000
1880-81	29.86	1881	20,600,000
1881-82	16.14	1882	21,000,000
1882-83	20.12	1883	20,100,000
1883-84	32.28	1884	28,830,000
1884-85	18.10	1885	15,177,980
1885-86	33.05	1886	21,394,380
1886-87	19.04	1887	17,315,380
1887-88	16.74	1888	*16,650,000

* Estimated.

STATISTICS CROP YEAR 1887-88.

	Wheat—Tons.
Exports flour, 855,199 barrels equals	128,280
Exports wheat	446,186
Total exports	574,466
Local consumption	310,000
Stock carried over first of July, 1888	204,886
Total	1,089,352

Deduct.	Wheat—Tons.
Flour from Oregon, 434,948 quarter sacks	16,310
Wheat from Oregon	59,186
Imports by rail (estimated)	1,000
Total imports	76,496
Stocks carried over first of July, 1887	147,062
	223,558
Crop of 1887	865,794

ARRIVALS OF NEW BARLEY.

The first receipts of new barley for a series of years past, and the price it brought, is annexed:

YEAR.	Month.	Price.
1870	June 19	\$1 20
1871	June 12	1 57½
1872	June 6	1 40
1873	June 5	1 10
1874	June 9	1 45
1875	June 20	1 35
1876	May 30	90
1877	June 30	1 55
1878	June 11	80
1879	June 30	75
1880	June 24	68¾
1881	June 21	90
1882	June 12	1 65
1883	June 25	95
1884	July 9	90
1885	June 16	1 25
1886	May 27	1 10
1887	June 4	1 15
1888	June 5	92½

ARRIVALS OF NEW WHEAT.

The date of arrival of new wheat at tide water each year since that cereal was first produced in quantity, and the price obtained for the same, is given below:

YEAR.	Month.	Price.
1859	July 14.....	\$1 90 @ \$2 00
1860	July 3.....	1 50 @ 1 55
1861	July 24.....	1 50 @ 1 62
1862	July 11.....	1 62 @ 1 65
1863	July 25.....	1 50 @ 1 60
1864	July 9.....	2 80 @ 2 95
1865	June 12.....	2 20 @ 2 25
1866	June 25.....	1 50 @ 1 60
1867	June 17.....	1 65 @ 1 70
1868	June 18.....	1 90 @ 2 00
1869	June 15.....	1 40 @ 1 45
1870	June 9.....	1 70 @ 1 80
1871	June 23.....	2 30 @ 2 37
1872	June 10.....	1 80 @ 1 85
1873	June 7.....	1 75 @ 1 80
1874	June 11.....	1 65 @ 1 67
1875	June 2.....	1 65 @ 1 67
1876	June 9.....	1 75 @ ----
1877	June 2.....	2 40 @ ----
1878	June 13.....	1 70 @ ----
1879	June 20.....	1 65 @ ----
1880	June 24.....	1 00 @ ----
1881	June 7.....	1 25 @ 1 40
1882	June 6.....	1 67 @ ----
1883	June 19.....	1 65 @ ----
1884	June 30.....	1 45 @ 1 45
1885	June 3.....	1 42½ @ ----
1886	June 5.....	1 25 @ ----
1887	June 11.....	1 86 @ ----
1888	June 15.....	1 31¼ @ ----

AVERAGE PRICE OF WHEAT.

The average price of No. 1 white wheat, spot, each cereal year since 1870-71 is as follows:

YEAR.	Per Cental.	YEAR.	Per Cental.
1870-71	\$2 20½	1879-80	\$1 82
1871-72	2 34	1880-81	1 42½
1872-73	1 76½	1881-82	1 60
1873-74	2 05½	1882-83	1 73½
1874-75	1 62	1883-84	1 64½
1875-76	1 93½	1884-85	1 31½
1876-77	1 92½	1885-86	1 43½
1877-78	2 18	1886-87	1 52½
1878-79	1 67¾	1887-88	1 40½

WHEAT AND BARLEY OPTIONS—1888.

The following official figures of the San Francisco Produce Exchange Call Board Association show the highest and lowest prices of wheat options during each month of 1888:

MONTH.	Buyer '88.		Buyer Season Ending May 31, 1888.		Buyer Season Ending May 31, 1889.	
	High.	Low.	High.	Low.	High.	Low.
January.....			\$1 48 $\frac{1}{2}$	\$1 40 $\frac{1}{2}$		
February.....			1 42 $\frac{1}{2}$	1 37 $\frac{1}{2}$		
March.....	\$1 48 $\frac{5}{8}$	\$1 37	1 40 $\frac{1}{8}$	1 32 $\frac{1}{4}$		
April.....	1 57 $\frac{1}{2}$	1 35 $\frac{1}{4}$	1 43	1 27 $\frac{1}{8}$		
May.....	1 65 $\frac{3}{8}$	1 47 $\frac{1}{4}$	1 47 $\frac{1}{2}$	1 32		
June.....	1 50	1 44 $\frac{1}{8}$				
July.....	1 58	1 48				
August.....	1 78 $\frac{1}{2}$	1 56 $\frac{3}{8}$				
September.....	1 73 $\frac{1}{2}$	1 57 $\frac{1}{4}$			\$1 78	\$1 66
October.....	1 77 $\frac{1}{4}$	1 66			1 86	1 78
November.....	1 68 $\frac{3}{8}$	1 55 $\frac{1}{4}$			1 80 $\frac{3}{4}$	1 64 $\frac{3}{4}$
December.....	1 55 $\frac{1}{4}$	1 41			1 64 $\frac{3}{4}$	1 46 $\frac{3}{4}$

MONTH.	Buyer '89.		October.		November.	
	High.	Low.	High.	Low.	High.	Low.
January.....						
February.....						
March.....						
April.....						
May.....						
June.....						
July.....						
August.....			\$1 66 $\frac{1}{2}$	\$1 46 $\frac{1}{2}$		
September.....			1 62	1 48	\$1 65 $\frac{3}{4}$	\$1 50
October.....			1 65 $\frac{1}{4}$	1 58 $\frac{1}{2}$	1 69 $\frac{1}{2}$	1 60
November.....						
December.....	\$1 67	\$1 51				

The highest and lowest prices of No. 1 feed barley options during each month of 1888 were as follows:

MONTH.	Buyer Season Ending May 31, 1888.		Buyer '88.		Buyer Season Ending May 31, 1889.		Seller '88—New Barley.	
	High.	Low.	High.	Low.	High.	Low.	High.	Low.
January.....	\$0 95 $\frac{3}{4}$	\$0 84 $\frac{3}{4}$	\$1 00	\$0 90 $\frac{1}{4}$				
February.....	88	83 $\frac{1}{4}$	93 $\frac{1}{4}$	89 $\frac{1}{2}$				
March.....	85	79	93 $\frac{1}{2}$	87 $\frac{1}{2}$				
April.....	1 00	77 $\frac{1}{8}$	1 11 $\frac{3}{4}$	86				
May.....	1 02 $\frac{1}{2}$	76	1 19 $\frac{1}{2}$	95 $\frac{1}{4}$				
June.....			1 00	90 $\frac{1}{4}$	\$1 09	\$0 99	90 $\frac{1}{4}$	81
July.....			94 $\frac{1}{4}$	90	1 01 $\frac{1}{2}$	99	83 $\frac{1}{2}$	81 $\frac{1}{2}$
August.....			95	90 $\frac{1}{2}$	1 04 $\frac{1}{2}$	98 $\frac{1}{2}$	85	81 $\frac{1}{2}$
September.....			95	89	1 05 $\frac{1}{2}$	99	84 $\frac{3}{4}$	82
October.....			91 $\frac{1}{2}$	87	1 02 $\frac{1}{4}$	97 $\frac{1}{2}$		
November.....			90 $\frac{1}{2}$	85 $\frac{1}{2}$	1 00 $\frac{1}{2}$	95		
December.....			89 $\frac{1}{4}$	78	95 $\frac{1}{4}$	89		

Highest, lowest, and average prices of wheat and barley for the year 1888. Quotations based on actual sales in the sample market:

MONTH.	WHEAT.			BARLEY.		
	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.
January	\$1 36 $\frac{1}{2}$	\$1 38 $\frac{3}{4}$	\$1 33 $\frac{3}{4}$	\$0 83 $\frac{1}{2}$	\$0 87 $\frac{1}{2}$	\$0 75
February	1 31 $\frac{1}{2}$	1 34 $\frac{1}{4}$	1 28 $\frac{3}{4}$	78 $\frac{1}{2}$	82 $\frac{1}{2}$	78 $\frac{3}{4}$
March	1 31	1 33 $\frac{3}{4}$	1 28 $\frac{3}{4}$	79 $\frac{1}{2}$	82 $\frac{1}{2}$	75
April	1 30	1 37 $\frac{1}{2}$	1 25	80	98 $\frac{3}{4}$	75
May	1 37 $\frac{1}{2}$	1 45	1 30	86 $\frac{1}{2}$	1 05	77 $\frac{1}{2}$
June	1 31 $\frac{1}{2}$	1 36 $\frac{1}{4}$	1 30	79 $\frac{1}{2}$	82 $\frac{1}{2}$	77 $\frac{1}{2}$
July	1 34 $\frac{1}{2}$	1 46	1 32 $\frac{1}{4}$	77 $\frac{1}{2}$	80	73 $\frac{3}{4}$
August	1 43 $\frac{1}{2}$	1 60	1 37 $\frac{1}{2}$	79 $\frac{1}{2}$	80	75
September	1 51 $\frac{1}{2}$	1 57 $\frac{1}{2}$	1 45	79 $\frac{1}{4}$	85	75
October	1 61 $\frac{1}{4}$	1 65	1 52 $\frac{1}{2}$	79 $\frac{1}{2}$	85	77 $\frac{1}{2}$
November	1 59 $\frac{1}{2}$	1 63 $\frac{1}{4}$	1 52 $\frac{1}{2}$	82 $\frac{3}{4}$	85	80
December	1 46 $\frac{3}{8}$	1 56 $\frac{1}{4}$	1 40	80 $\frac{3}{8}$	77 $\frac{1}{2}$	83 $\frac{3}{4}$

ANNUAL METEOROLOGICAL REVIEW
OF THE
STATE OF CALIFORNIA DURING THE YEAR 1888,

BY THE

Meteorological Department of the State Agricultural Society.

Collated and compiled by SERGEANT JAMES A. BARWICK, Observer Signal Corps, U. S. A.,
and Meteorologist to the State Board of Agriculture.

SACRAMENTO, CALIFORNIA, May 1, 1889.

EDWIN F. SMITH, *Secretary State Agricultural Society:*

SIR: I have the honor to transmit herewith my fifth annual weather review for the year 1888, of the State of California, as meteorologist to your Society. The greater portion of the State is herein represented, some portions better than others—the cause of which is due to the impossibility of getting those who ought to be interested in such matters to forward any data whatever; this is especially so in regard to San Diego City and County. I wrote to three different parties, including the Signal Service Observer at San Diego, who is the only one of the three that responded, and his report is very meager of meteorological data to what it could be made. If data asked for is not forthcoming, then certainly I am not to blame, nor should I be held responsible for the small space that portion of this State may occupy in this review. I must confess that I myself am greatly disgusted and discouraged at the small amount of interest taken by its people in the climatic conditions of this State, which stands preëminently as the central and best portion of the Pacific Slope, as well as the great and glorious Golden West. Even our snowy neighbor, silvery Nevada, has had established a “State Weather Service,” by its intelligent and far-seeing legislators. Certainly, if that State deems a systemized and accurate record of its climate should be blazoned and advertised to the world, what ought Californians to think, whose glittering golden star of destiny stands out in magnificent brilliancy, amidst the grand galaxy of twinkling emblems that deck the blue field of our great American banner, the stars and stripes, whose colors may never grow dim, nor its folds be trailed in the dust by an enemy. Why, our Oregonian neighbors of the north elected members to their Legislature, who, during their session of 1888–89, covered themselves, not with ingratitude, but with everlasting honor and glory by passing a bill that gives to the people of that community a “State Weather Service,” whose climate is never so good, healthful, or healing as our own. How long? O Lord! how long will our scions of civilization, monopolization, and culture travel

in the ruts of our grandfathers, and instead of being at the head of advancing science of climate, health, and beauty, are satisfied to bring up the rear and come in last in the race for advancement in all the details of encouragement to immigration, that they may assist in the fructification and increased fruitfulness of our land? Let it come quickly will ever be the desire and wish of yours, very truly, etc.,

JAMES A. BARWICK,
Meteorologist of the State Agricultural Society.

GENERAL WEATHER REVIEW OF SACRAMENTO CITY AND COUNTY.

This city is geographically situated in latitude north $38^{\circ} 35'$; longitude west from Greenwich, $121^{\circ} 30'$; elevation above sea level, 35 feet; elevation of the zero point of the barometer cistern above sea level, 64 feet.

The following tabulated data show the general meteorological features of the weather of this city for the months of January, February, March, and April, from 1878 to 1889, inclusive. For May, and June, from 1878 to 1888, inclusive, and for July, August, September, October, November, and December, from 1877 to 1888, inclusive. A review by seasons, winter, spring, summer, and autumn. Also, an annual review of the weather from 1878 to 1888.

January Weather in Sacramento, from 1878 to 1889.—This table shows the mean average barometer, the highest, lowest, and range of barometer; the average temperature, highest, lowest, and monthly range of temperature; the greatest and least daily range of temperature; the average maximum, minimum, and range of temperature; average relative humidity and dew point; prevailing direction of wind, total rainfall, monthly velocity of wind, maximum velocity of wind, and prevailing direction at time of maximum velocity; clear, fair, cloudy, and foggy days; number of days rain fell; thunder and lightning storms; solar and lunar halos; light and killing frosts; days snow fell; number of days the temperature was below 32°.

JANUARY:	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.
Average barometer.....	30.05	30.15	30.16	30.15	30.14	30.27	30.16	30.18	30.09	30.16	30.13	30.09
Highest barometer.....	30.33	30.46	30.44	30.46	30.42	30.61	30.51	30.43	30.58	30.51	30.63	30.37
Lowest barometer.....	29.46	29.85	29.74	29.80	29.75	29.88	29.60	29.87	29.32	29.69	29.51	29.51
Range of barometer.....	0.87	0.73	0.70	0.66	0.67	0.73	0.98	0.56	1.08	0.82	1.12	0.86
Average temperature.....	49.7	45.5	43.5	49.2	45.2	42.0	46.6	47.2	45.7	48.5	42.8	44.6
Highest temperature.....	62.0	63.0	61.0	64.0	62.0	62.0	61.0	62.0	62.2	65.2	63.0	62.5
Lowest temperature.....	27.0	29.3	25.0	35.0	29.0	22.0	31.0	34.2	27.5	30.0	19.0	31.0
Range of temperature.....	35.0	33.7	36.0	29.0	33.0	40.2	30.0	27.8	34.7	35.2	44.0	31.5
Greatest range of temperature.....	22.0	25.2	22.0	21.0	22.1	23.6	29.0	19.0	21.5	28.8	24.0	30.0
Least range of temperature.....	6.0	9.6	6.0	4.0	5.8	5.9	8.5	5.0	3.5	6.3	6.0	3.7
Average maximum temperature.....	55.4	53.7	50.7	55.0	53.3	49.5	55.9	52.7	52.0	57.7	49.9	53.6
Average minimum temperature.....	41.9	35.8	35.2	43.0	38.2	34.0	37.9	42.0	40.4	39.3	35.7	35.8
Mean range of temperature.....	13.5	17.9	15.5	12.0	15.1	15.6	18.0	10.7	11.6	18.4	14.2	17.8
Average humidity.....	79.0	72.0	78.9	82.3	69.7	82.7	80.8	88.2	89.6	73.3	80.2	78.1
Average dew point.....	S.E.	N.	S.E.	S.E.	N.	36.6	40.7	43.7	42.6	39.6	36.8	37.6
Prevailing wind.....	S.E.	N.	S.E.	S.E.	N.	S.E.	S.E.	S.E.	S.E.	N.W.	N.A.S.E.	N.W.
Total precipitation.....	9.26	3.18	1.64	6.14	1.89	2.23	3.43	2.16	7.95	1.12	4.81	0.15
Total velocity of wind.....	4,906	4,742	4,365	5,548	5,718	3,770	4,279	3,738	5,366	4,404	4,380	3,708
Maximum velocity of wind.....	28	33	32	32	32	36	30	18	44	26	36	27
Direction of maximum velocity.....	S.E.	N.	S.E.	S.E.	N.	N.W.	S.E.	S.E.	S.E.	N.W.	N.	N.W.
Clear days.....	8	11	18	10	17	11	13	9	14	21	8	18
Fair days.....	9	15	5	10	9	11	10	12	11	7	12	9
Cloudy days.....	14	5	8	11	5	3	8	10	6	3	11	4
Days rain fell.....	17	10	7	11	8	4	8	8	13	6	18	6
Foggy days.....	0	0	2	3	0	3	0	0	4	0	0	0
Electric storms.....	0	0	0	0	0	0	0	0	1	0	0	0
Solar halos.....	0	0	1	1	1	0	3	0	0	0	0	0
Lunar halos.....	0	0	3	1	1	0	2	0	0	0	0	1
Light frosts.....	3	5	4	9	10	3	1	6	3	3	0	8
Killing frosts.....	6	11	10	0	7	13	9	0	6	7	11	9
Days snow fell.....	0	1	1	0	0	0	0	0	0	0	3	0
Days temperature below 32°.....	5	7	8	0	2	11	2	0	4	3	12	5

Character of Weather Conditions for January, as Shown by Observations of the Past Eleven Years.—Possible range of maxima temperatures, between 65° in 1887 and 37° in 1888. Possible range in minima temperatures, between 54° in 1881-82 and 19° in 1888. Possible range of monthly mean temperatures, between 50° in 1878 and 42° in 1883. Clear days, one day in 23. Rain (or snow), one day in three, averaging 0.13 of an inch daily. Cloudy (including rainy) days, one day in three. Wind, hourly mean velocity of 6.3 miles; most frequent direction, from the southeast.

February Weather in Sacramento, from 1878 to 1889.—This table gives the mean average barometer, temperature, relative humidity, and dew point; the highest and lowest barometer and temperature, with the monthly range of each; the greatest and least daily range of temperature; the average, maximum, minimum, and range of temperature; prevailing wind; total rainfall; total and maximum velocity of wind, and the direction at time of maximum velocity; clear, fair, cloudy, and foggy days, and total number of days rain fell; solar and lunar halos; light and killing frosts; days snow fell; and number of days the minimum temperature was below 32°.

FEBRUARY:	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.
Average barometer.....	29.96	30.10	30.19	30.11	30.17	30.14	30.04	30.14	30.08	30.02	30.08	30.11
Highest barometer.....	30.36	30.30	30.48	30.41	30.52	30.71	30.43	30.43	30.38	30.46	30.30	30.37
Lowest barometer.....	29.50	29.77	29.76	29.85	29.75	29.58	29.42	29.86	29.68	29.54	29.79	29.61
Range of barometer.....	0.86	0.53	0.72	0.56	0.77	1.06	1.01	0.57	0.70	0.92	0.51	0.76
Average temperature.....	51.3	55.0	46.0	53.5	46.3	46.0	46.9	54.0	53.3	44.7	52.6	50.3
Highest temperature.....	61.0	73.5	64.0	67.0	62.8	71.7	71.0	70.0	72.7	67.0	75.0	76.0
Lowest temperature.....	40.0	33.0	34.0	40.0	30.9	22.0	21.0	39.8	38.0	30.0	34.0	31.0
Range of temperature.....	21.0	40.5	34.0	27.0	31.9	49.7	50.0	30.2	34.7	37.0	41.0	45.0
Greatest range of temperature.....	16.0	28.5	28.0	19.0	23.3	28.0	25.6	21.5	23.0	25.2	28.5	35.0
Least range of temperature.....	5.0	5.5	9.0	5.0	9.0	11.0	7.0	8.0	7.0	7.2	10.0	9.0
Average maximum temperature.....	56.3	63.1	54.7	59.3	54.6	55.9	56.1	62.5	61.4	52.2	62.2	61.0
Average minimum temperature.....	45.6	45.6	36.4	47.7	38.3	35.9	38.9	46.4	47.1	37.4	43.7	39.3
Mean range of temperature.....	10.7	17.5	18.3	11.6	16.3	20.0	17.2	16.1	14.3	14.8	18.5	21.7
Average humidity.....	80.0	73.0	68.5	82.2	74.1	68.3	79.7	73.8	81.5	76.7	72.1	70.6
Average dew point.....					37.9	35.3	40.5	45.2	47.2	37.3	42.8	39.6
Prevailing wind.....	S.E.	N.	S.E.	S.E.	S.E.	N.	N.	N.W.	N.W.	S.	S.E.	S.E.
Total precipitation.....	8.04	3.88	1.83	5.06	2.40	1.11	4.46	0.49	0.29	6.28	0.57	0.33
Total velocity of wind.....	5,559	3,877	4,442	4,038	5,176	3,817	5,170	4,851	4,065	6,305	4,500	3,314
Maximum velocity of wind.....	36	33	32	22	27	23	33	31	32	33	36	35
Direction of maximum velocity.....	N.	N.	S.E.	S.W.	N.&S.E.	N.W.	S.	N.W.	N.W.	N.W.	N.W.	N.W.
Clear days.....	5	11	16	7	11	19	17	18	17	8	21	13
Fair days.....	8	11	4	11	11	8	5	2	11	11	7	12
Cloudy days.....	15	6	9	10	6	1	7	2	0	9	1	3
Days rain fell.....	17	9	10	13	10	4	10	6	3	14	5	5
Electric storms.....	0	0	0	0	0	0	0	0	0	0	0	0
Solar halos.....	0	0	0	0	1	0	0	0	0	0	1	0
Lunar halos.....	0	0	0	1	0	0	0	0	0	0	0	0
Light frosts.....	0	0	3	2	10	3	0	6	0	4	2	6
Killing frosts.....	0	2	7	0	3	13	8	0	0	6	3	3
Days snow fell.....	0	0	0	0	2	2	0	0	0	0	0	0
Days temperature below 32°.....	0	0	1	0	2	11	6	0	0	1	0	2

Character of Weather Conditions for February, as Shown by Observations of the Past Eleven Years.—Possible range of maxima temperatures, between 75° in 1888 and 40° in 1883. Possible range of minima temperatures, between 56° in 1879 and 1881 and 21° in 1884. Possible range of mean monthly temperatures, between 56° in 1879 and 45° in 1887. Clear days, one day in two. Rain (or snow), one day in three, averaging 0.11 of an inch daily. Cloudy (including rainy) days, one day in five. Wind, hourly mean velocity, 7 miles; most frequent direction, from the southeast.

March Weather in Sacramento, from 1878 to 1889.—This comparative weather table shows the average, highest, lowest, and range of barometer; the average, highest, lowest, and range of temperature; the greatest and least daily range of temperature; the average, maximum, minimum, and range of temperature; average relative humidity and dew point; the prevailing cloudiness and total velocity of wind; maximum velocity, and direction at the time of maximum velocity; total number of clear, fair, cloudy, and foggy days, along with the number of days rain fell; thunder and lightning storms; solar and lunar halos; light and killing frosts; number of days the minimum temperature was below 32°.

MARCH:	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.
Average barometer.....	30.02	30.08	30.10	30.07	30.10	30.02	29.96	30.06	30.04	30.10	30.01	29.96
Highest barometer.....	30.39	30.33	30.36	30.41	30.38	30.24	30.30	30.37	30.35	30.32	30.48	30.28
Lowest barometer.....	29.61	29.73	29.76	29.68	29.71	29.62	29.51	29.80	29.63	29.88	29.64	29.41
Range of barometer.....	0.78	0.60	0.60	0.73	0.67	0.62	0.79	0.57	0.72	0.44	0.84	0.87
Average temperature.....	56.7	57.4	48.8	55.5	53.0	56.9	52.9	59.1	52.1	57.8	53.6	57.0
Highest temperature.....	72.0	75.0	72.0	79.0	80.0	78.2	70.5	77.0	72.0	78.7	76.5	76.0
Lowest temperature.....	40.0	38.0	29.0	37.0	34.1	42.5	39.0	45.8	37.7	40.7	37.0	41.0
Range of temperature.....	32.0	37.0	43.0	42.0	45.9	35.7	31.5	31.2	34.3	38.0	39.5	35.0
Greatest range of temperature.....	21.0	26.0	30.0	23.0	26.0	31.0	22.7	28.0	26.3	31.3	28.3	35.0
Least range of temperature.....	6.0	7.0	9.0	8.0	6.9	6.0	6.5	13.0	8.3	10.5	7.5	5.0
Average maximum temperature.....	63.6	64.8	59.5	64.0	62.5	69.3	60.7	70.5	60.8	69.4	62.7	66.3
Average minimum temperature.....	49.5	49.3	38.9	47.6	44.8	47.1	46.7	50.2	44.2	46.9	44.5	48.5
Mean range of temperature.....	14.1	15.5	20.6	16.4	17.7	22.2	14.0	20.3	16.6	22.6	18.2	17.8
Average humidity.....	74.0	74.0	60.1	68.3	64.2	71.4	76.3	65.2	70.6	67.6	67.7	76.2
Average dew point.....					39.8	46.9	45.2	46.4	41.7	46.2	42.0	48.3
Prevailing wind.....	S.	S.	S.E.	N.	N.	S.	N.	S.W.	N.W.	N.W.	N.W.	S.E.
Total precipitation.....	3.09	4.88	1.70	1.37	3.78	3.70	8.14	0.08	2.68	0.94	3.04	6.25
Total velocity of wind.....	4,135	4,757	6,470	4,804	6,396	4,688	6,787	5,312	6,567	4,469	6,736	5,273
Maximum velocity of wind.....	24	22	36	28	28	26	35	24	37	24	48	30
Direction of maximum velocity.....	N.	S.W.	N.	N.	S.E.&N.	S.E.	S.	N.W.&N.S.W.	N.W.	N.W.	S.E.	N.W.
Clear days.....	8	9	19	21	16	22	13	17	14	21	17	6
Fair days.....	11	12	7	5	6	5	7	11	12	8	8	12
Cloudy days.....	12	10	5	5	9	4	11	3	5	2	6	13
Days rain fell.....	14	15	8	7	13	6	15	2	12	6	9	14
Electric storms.....	0	0	0	0	0	0	0	0	1	0	0	2
Solar halos.....	1	0	1	0	0	0	0	0	0	2	0	1
Lunar halos.....	0	0	0	0	1	0	0	0	2	0	1	0
Light frosts.....	2	1	3	5	5	0	10	0	2	0	0	1
Killing frosts.....	0	0	0	0	0	0	0	0	0	0	0	0
Days temperature below 32°.....	0	0	1	0	0	0	0	0	0	0	0	0

Character of Weather Conditions for March, as Shown by Observations of the Past Eleven Years.—Possible range of maxima temperatures, between 80° in 1882 and 47° in 1888. Possible range of minima temperatures, between 50° in 1880–81 and 33° in 1880. Possible range of mean monthly temperatures, between 59° in 1885 and 49° in 1880. Clear days, one day in two. Rain (or snow), one day in three, averaging 0.10 of an inch daily. Cloudy (including rainy) days, one day in three. Wind, hourly mean velocity, 7.5 miles; most frequent direction, south.

April Weather in Sacramento, from 1876 to 1889.—The data contained in this table show the monthly average, the highest, lowest, and monthly range of the barometer; the monthly average, the highest, lowest, and monthly range of temperature; the greatest and least daily range of temperature; average maximum, minimum, and range of temperature; average relative humidity and dew point; total precipitation; prevailing direction, total, and maximum velocity of wind, with the direction at time of maximum velocity; total number of clear, fair, and cloudy days, with the total number of days rain fell; auroras; solar and lunar halos; light frosts.

APRIL:	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.
Average barometer	30.02	30.02	30.04	29.93	30.05	30.04	29.98	29.93	29.95	29.99	30.02	30.00
Highest barometer	30.21	30.32	30.25	30.22	30.29	30.43	30.25	30.20	30.24	30.26	30.27	30.28
Lowest barometer	29.36	29.79	29.55	29.78	29.80	29.68	29.62	29.52	29.63	29.70	29.81	29.79
Range of barometer	0.65	0.53	0.70	0.44	0.49	0.75	0.63	0.68	0.61	0.56	0.46	0.49
Average temperature	59.4	60.3	54.6	60.9	55.8	56.0	56.7	60.6	55.5	58.3	62.3	60.4
Highest temperature	78.0	83.0	78.0	84.0	82.2	76.0	74.2	83.0	79.7	83.5	89.0	81.0
Lowest temperature	41.0	44.6	40.0	44.0	40.5	39.8	40.0	39.0	39.0	41.2	42.7	42.0
Range of temperature	37.0	38.4	38.0	40.0	41.7	36.2	34.2	44.0	40.7	42.3	46.3	42.0
Greatest range of temperature	27.0	28.0	24.0	26.0	32.8	31.0	22.5	31.0	26.2	32.0	33.0	30.0
Least range of temperature	11.0	6.5	6.0	6.0	7.0	10.0	6.0	10.0	5.3	8.3	16.9	6.0
Average maximum temperature	68.1	69.7	62.6	71.8	65.9	66.5	65.8	71.3	65.4	69.5	76.7	71.3
Average minimum temperature	49.8	51.1	47.5	52.7	47.2	46.6	49.5	51.5	48.1	48.9	49.2	51.2
Average range of temperature	18.3	18.6	15.1	19.1	18.7	19.9	16.3	19.8	17.3	20.7	27.5	20.1
Average humidity	65.6	65.4	73.0	70.6	64.2	66.1	74.6	71.1	75.8	65.5	65.0	68.4
Average dew point					42.4	43.8	48.2	50.5	47.3	45.5	49.2	48.4
Prevailing wind	S.	S.	S.	S.	N.	S.	S.W.	S.W.	S.	N.W.	S.W.	S.W.
Total precipitation	1.07	2.63	14.20	1.64	1.99	0.67	4.32	0.68	4.08	2.53	0.10	0.26
Total velocity of wind	4,759	4,814	6,597	4,787	5,785	5,933	5,609	5,039	5,720	6,320	4,170	4,775
Maximum velocity of wind	32	32	34	22	35	34	27	23	36	30	24	24
Direction of wind of maximum velocity	N.W.	N.	S.	S.	N.	N.W.	S.E.	S.	N.W.	N.W. & S.E.	S.W.	S.W. & N.W.
Clear days	15	14	10	17	16	16	13	14	13	20	23	8
Fair days	12	9	10	9	9	13	7	12	12	7	5	15
Cloudy days	3	7	10	4	5	1	10	4	5	3	2	7
Days rain fell	4	12	16	8	9	8	9	7	12	10	2	11
Electric storms	0	0	0	0	0	0	0	0	0	0	0	0
Auroras	0	0	0	0	1	0	0	0	0	0	0	0
Solar halos	0	1	1	0	1	3	3	0	3	0	1	0
Lunar halos	0	0	1	0	1	0	2	0	0	0	1	0
Light frosts	0	1	0	0	1	2	0	4	2	1	0	0

Character of Weather Conditions for April, as Shown by Observations of the Past Eleven Years.—Possible range of maxima temperatures, between 89° in 1888 and 51° in 1880. Possible range of minima temperatures, between 69° in 1885 and 39° in 1886. Possible range of mean monthly temperatures, between 62° in 1888 and 55° in 1880. Clear days, one day in two. Rain, three days in ten, averaging 0.11 of an inch daily. Cloudy (including rainy) days, one day in six. Wind, hourly mean velocity, 8 miles; most frequent direction, south.

May Weather in Sacramento, from 1878 to 1888.—The meteorological record of the following table consists of the average monthly, the highest, lowest, and monthly range of barometer; average monthly, the highest, lowest, and monthly range of temperature; greatest and least daily range of temperature; average, maximum, minimum, and range of temperature; average relative humidity and dew point; total precipitation; prevailing, total, and maximum velocity of wind; the direction at the time of maximum velocity; total number of clear, fair, and cloudy days, with the total number of days rain fell; light frosts; solar and lunar halos; number of days the maximum temperature was above 90°:

MAY:	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.
Average barometer	29.91	30.05	30.03	29.93	29.96	29.97	29.96	29.89	30.00	29.96	29.91
Highest barometer	30.11	30.27	30.24	30.12	30.19	30.27	30.12	30.04	30.19	30.25	30.09
Lowest barometer	29.62	29.84	29.79	29.77	29.75	29.74	29.75	29.69	29.78	29.71	29.74
Range of barometer	0.49	0.43	0.45	0.35	0.44	0.53	0.37	0.35	0.41	0.54	0.35
Average temperature	65.5	60.2	61.6	64.8	64.0	62.6	64.0	65.7	62.0	62.9	61.8
Highest temperature	91.0	91.0	86.0	88.8	94.6	98.0	85.0	98.0	94.0	97.7	90.0
Lowest temperature	47.0	43.0	39.0	48.5	40.6	42.2	50.5	49.5	44.5	39.0	45.5
Range of temperature	44.0	48.0	47.0	40.3	54.6	55.8	34.5	48.5	49.5	58.7	44.5
Greatest range of temperature	29.0	32.0	26.0	31.6	31.5	33.5	25.0	33.0	35.5	35.0	33.5
Least range of temperature	11.0	10.0	11.0	15.3	15.1	9.5	12.5	15.0	8.5	13.2	13.5
Average maximum temperature	76.7	71.3	71.5	78.5	76.8	73.7	75.4	79.8	75.4	75.9	75.1
Average minimum temperature	54.6	50.4	52.6	54.7	53.1	53.5	55.7	54.8	52.2	50.5	50.3
Average range of temperature	22.1	20.9	18.9	23.8	23.7	20.2	19.7	25.0	23.2	25.3	24.8
Average humidity	57.0	59.0	60.8	55.8	57.2	63.2	69.0	58.6	69.2	62.9	67.9
Average dew point	S.	S.W.	N.W.	S.	S.W.	51.3	53.1	49.5	51.0	48.8	49.9
Prevailing wind	S.	S.W.	N.W.	S.	S.W.	S.	S.	S.W.	S.W.	S.W.	S.W.
Total precipitation	0.17	1.30	0.76	spr.	0.35	2.85	0.06	spr.	0.07	spr.	0.40
Total velocity of wind	5,088	4,959	6,586	5,428	5,593	5,204	5,772	6,289	5,467	6,422	5,934
Highest velocity of wind	40	32	32	25	25	28	26	30	27	29	24
Direction at highest velocity	N.	N.	N.W.	N.	N.W.	N.W.	S.W.	N.W.	N.W.	N.W.	S.W.
Clear days	22	16	20	22	25	16	19	26	23	21	19
Fair days	5	13	7	8	4	8	9	5	6	9	10
Cloudy days	2	4	4	1	2	7	3	0	2	1	2
Days rain fell	3	5	3	1	3	10	3	1	2	1	3
Electric storms	0	0	0	0	0	0	0	0	0	0	1
Light frosts	0	0	0	0	4	2	0	0	0	2	0
Solar halos	0	0	1	0	0	2	2	0	3	3	1
Lunar halos	0	0	0	0	0	0	1	0	0	0	0
Days temperature above 90°	1	1	0	0	2	2	0	4	1	3	0

Character of Weather Conditions for May, as Shown by Observations of the Past Eleven Years.—Possible range of maxima temperature, between 98° in 1883, 1885, and 1887, and 55° in 1880. Possible range of minima temperature, between 68° in 1883 and 39° in 1880. Possible range of mean monthly temperature, between 66° in 1885 and 66° in 1879. Clear days, one day in 15. Rain, one day in ten, averaging 0.018 of an inch daily. Cloudy (including rainy) days, one day in ten. Wind, hourly mean velocity, 7.6 miles; most frequent direction, southwest.

June Weather in Sacramento, from 1878 to 1888.—The recorded data below give the monthly average barometer, along with the highest, lowest, and monthly range of barometer; the average monthly temperature, with the highest, lowest, and monthly range of temperature; the greatest and least daily range of temperature; the mean maximum, minimum, and average range of temperature; average relative humidity and dew point; the prevailing direction, total and maximum velocity of wind, along with the direction at the time of maximum velocity; the total number of clear, fair, and cloudy days, and the number of days rain fell; solar and lunar halos; total number of days the maximum temperature was above 90°:

JUNE:	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.
Average barometer	29.83	29.84	29.92	29.91	29.88	29.91	29.95	29.94	29.87	29.82	29.90
Highest barometer	30.12	30.08	30.19	30.11	30.08	30.20	30.14	30.12	30.06	30.04	30.11
Lowest barometer	29.67	29.65	29.73	29.70	29.72	29.63	29.77	29.73	29.65	29.55	29.71
Range of barometer	0.45	0.43	0.46	0.41	0.36	0.57	0.37	0.39	0.41	0.49	0.40
Average temperature	71.8	72.1	66.6	66.2	68.1	72.6	65.8	66.2	69.0	69.1	67.7
Highest temperature	99.0	100.0	88.0	93.5	94.6	102.5	92.0	91.0	97.7	100.0	96.0
Lowest temperature	49.0	52.0	51.0	48.0	51.2	49.8	52.9	51.0	51.5	47.0	48.5
Range of temperature	50.0	48.0	37.0	45.5	43.4	52.7	39.1	40.0	46.2	53.0	47.5
Greatest range of temperature	36.0	33.0	30.0	31.9	33.4	36.0	30.0	34.0	35.5	37.0	38.7
Least range of temperature	17.0	17.0	14.0	13.1	15.0	15.1	8.5	13.0	15.0	17.1	11.0
Mean maximum temperature	86.0	85.7	79.9	80.5	82.7	88.1	76.3	79.9	85.3	84.4	80.8
Mean minimum temperature	58.4	59.8	55.8	56.0	56.4	60.1	57.6	55.9	57.0	55.1	55.2
Mean range of temperature	27.6	25.9	24.1	24.5	26.3	28.0	18.7	24.0	28.3	29.4	25.5
Average humidity	53.0	50.4	52.3	54.9	59.3	59.5	69.8	59.0	60.4	59.2	59.5
Average dew point	S.	S.	none	S.	52.1	56.4	55.1	50.4	53.5	52.6	51.6
Prevailing wind	S.	S.	none	S.	S.	S.	S.	S.W.	S.W.	S.W.	S.W.
Total precipitation	0.13	0.13	none	0.50	0.10	none	1.45	0.11	none	none	0.08
Total velocity of wind	4,874	5,062	5,947	5,684	5,529	5,928	5,506	6,716	5,837	5,791	5,494
Maximum velocity of wind	20	26	22	S.W.	23	31	22	24	42	30	36
Direction of maximum velocity	N.W.	N.	S.	S.W.	S.	N.W.	S.W.	S.W.	N.W.	S.W.	S.W.
Clear days	27	23	29	24	25	28	18	24	30	24	17
Fair days	3	7	1	5	4	2	5	5	0	6	9
Cloudy days	0	0	0	1	1	0	7	1	0	0	4
Days rain fell	0	1	0	2	1	0	7	2	0	0	7
Electric storms	0	0	0	0	0	0	0	0	0	0	0
Solar halos	0	0	0	0	1	2	0	1	0	1	7
Lunar halos	0	0	0	0	0	0	0	0	0	0	0
Number of days temperature was above 90°	6	10	0	2	5	11	1	2	5	8	2

Character of Weather Conditions for June, as Shown by Observations of the Past Eleven Years.—Possible range of maxima temperatures, between 102° in 1883 and 62° in 1884. Possible range of minima temperatures, between 72° in 1883–87 and 47° in 1887. Possible range of mean monthly temperatures, between 73° in 1883 and 66° in 1881, 1884, and 1886. Clear days, one day in 12. Rain, one day in thirty, averaging 0.008 of an inch daily. Cloudy (including rainy) days, one day in thirty. Wind, hourly mean velocity, 7.9 miles; most frequent direction, south.

July Weather in Sacramento, from 1877 to 1888.—In this table will be found the monthly average, highest, lowest, and monthly range of barometer; the monthly average, highest, lowest, and monthly range of temperature; the greatest and least daily range of temperature; the average, maximum, minimum, and range of temperature; average relative humidity and dew point; total precipitation; the prevailing direction, total, and maximum velocity of wind, along with the direction at time of maximum velocity; total number of clear, fair, and cloudy days, and number of days rain fell; solar halos; number of days the maximum temperature was above 90°:

July:	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.
Average barometer.....	29.82	29.83	29.85	29.88	29.91	29.91	29.89	29.92	29.90	29.84	29.89	29.90
Highest barometer.....	29.99	29.97	30.02	30.02	30.14	30.10	30.10	30.10	30.10	30.05	30.11	30.21
Lowest barometer.....	29.64	29.71	29.67	29.69	29.72	29.74	29.64	29.78	29.70	29.67	29.74	29.75
Range of barometer.....	0.25	0.26	0.35	0.33	0.42	0.36	0.46	0.32	0.40	0.38	0.37	0.46
Average temperature.....	75.0	73.4	71.8	70.9	71.1	73.4	73.1	71.2	71.0	72.0	70.2	71.6
Highest temperature.....	103.0	98.0	100.0	98.0	98.6	97.8	103.5	96.0	98.0	105.0	99.2	104.0
Lowest temperature.....	52.0	52.0	51.0	55.0	51.9	55.9	56.0	54.5	56.0	52.2	48.0	51.0
Range of temperature.....	51.0	46.0	49.0	43.0	46.7	41.9	47.5	41.5	42.0	52.8	51.2	53.0
Greatest range of temperature.....	39.0	38.0	34.0	34.0	35.7	35.6	37.0	31.8	35.0	37.8	40.0	39.0
Least range of temperature.....	15.0	17.0	21.0	21.0	19.5	21.6	22.0	15.1	16.0	24.5	25.5	19.0
Mean maximum temperature.....	91.4	88.5	87.6	86.3	87.1	90.1	90.6	85.4	86.2	89.7	88.3	89.5
Mean minimum temperature.....	60.0	58.8	57.6	59.1	59.2	60.6	60.7	60.1	59.7	58.9	54.3	57.3
Mean range of temperature.....	31.4	29.7	30.0	27.2	27.9	29.5	29.9	25.3	26.5	30.8	34.0	32.2
Average humidity.....	43.0	50.7	51.5	55.9	51.2	54.4	57.8	59.4	55.1	60.2	59.1	57.2
Average dew point.....	S.	S.	S.	S.	S.	54.5	56.3	55.5	52.9	56.3	53.9	52.6
Prevailing wind.....	S.	S.	S.	S.	S.	S.	S.	S.	S.	S.	S.	S.
Total precipitation.....	spr.	4.445	4.002	3.333	5.579	5.443	5.084	none	spr.	none	none	spr.
Total velocity of wind.....	4.572	15	15	18	20	28	17	24	6.594	4.850	5.589	5.905
Maximum velocity of wind.....	20	15	15	18	20	28	17	24	25	20	24	24
Direction of maximum velocity.....	S.	S.	S.W.	N.W.	N.W.	N.W.	S.W.	S.W.	S.	S.W.	S., S.W.	S., S.W.
Clear days.....	29	31	29	26	31	31	31	29	27	30	31	29
Fair days.....	1	0	2	5	1	0	0	2	4	1	0	2
Cloudy days.....	1	0	0	2	0	0	0	0	0	0	0	0
Days rain fell.....	1	0	1	2	1	2	0	0	1	0	0	2
Electric storms.....	0	0	0	0	0	0	0	0	0	0	0	0
Solar halos.....	0	0	0	0	0	0	1	0	1	0	0	1
Lunar halos.....	0	0	0	0	0	0	0	0	0	0	0	0
Number of days temperature was above 90°.....	20	14	11	5	10	15	12	7	9	13	13	15

Character of Weather Conditions for July, as Shown by Observations of the Past Twelve Years.—Possible range of maxima temperatures, between 105° in 1880 and 74° in 1879, 1881, and 1886. Possible range of minima temperatures, between 74° in 1886 and 48° in 1887. Possible range of mean monthly temperatures, between 75° in 1877 and 70° in 1887. Clear days, one day in 1884.

August Weather in Sacramento, from 1877 to 1888.—The meteorological data contained in the following report show the monthly average barometer; highest, lowest, and monthly range of barometer; monthly average temperature; the highest, lowest, and monthly range of temperature; greatest and least daily range of temperature; monthly average, maximum, minimum, and range of temperature; average relative humidity and dew point; total rainfall; prevailing direction, total velocity, and maximum velocity of wind, along with the direction at time of maximum velocity; total number of clear, fair, and cloudy days, and number of days rain fell; number of days the maximum temperature was above 90°:

August:	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.
Average barometer	29.89	29.82	29.80	29.84	29.89	29.89	29.92	29.89	29.83	29.83	29.80	29.85
Highest barometer	30.06	30.06	30.03	30.05	30.14	30.09	30.09	30.09	29.98	29.97	29.96	30.04
Lowest barometer	29.76	29.63	29.62	29.58	29.72	29.73	29.77	29.73	29.64	29.70	29.63	29.63
Range of barometer	0.30	0.43	0.41	0.47	0.42	0.36	0.32	0.36	0.34	0.27	0.33	0.41
Average temperature	72.9	73.4	74.7	69.7	68.2	71.9	71.4	72.5	73.0	71.6	69.1	75.4
Highest temperature	95.0	100.5	103.0	97.0	94.6	99.8	100.0	100.0	105.0	102.0	99.7	107.5
Lowest temperature	54.0	53.0	54.0	49.0	51.0	55.0	54.8	54.0	51.5	53.2	48.0	51.0
Range of temperature	41.0	47.5	49.0	48.0	43.6	44.8	45.2	46.0	53.5	48.8	51.7	56.5
Greatest range of temperature	39.0	35.0	40.0	33.0	35.3	35.6	38.5	38.8	42.0	42.8	43.0	43.0
Least range of temperature	23.0	18.0	19.0	19.0	21.7	23.0	19.0	20.5	21.5	23.0	22.0	25.0
Mean maximum temperature	89.7	88.2	90.9	85.4	84.6	89.4	88.9	88.7	91.9	90.4	86.6	94.5
Mean minimum temperature	56.4	58.9	60.4	57.0	56.0	58.6	59.2	60.8	59.8	58.4	53.6	56.5
Mean range of temperature	33.3	29.3	30.5	28.4	28.6	30.8	29.7	27.9	32.1	32.0	33.0	38.3
Average humidity	46.0	52.0	49.2	56.1	56.9	57.3	57.8	60.8	53.2	57.8	60.7	55.0
Average dew point.						54.7	54.4	57.5	53.3	54.8	53.5	54.8
Prevailing wind	S.	S.	S.	S.	S.	S.	S.	S.	S.	S.	S.	S.
Total precipitation	spr.	none	spr.	none	none	none	none	spr.	none	none	spr.	spr.
Total velocity of wind	3,650	3,984	3,981	4,786	5,189	4,477	4,597	5,234	5,164	4,233	5,085	4,226
Maximum velocity of wind	20	13	14	20	19	16	18	18	18	18	24	18
Direction of maximum velocity	S.	S.	S. & N.	S.	S.W.	S.	N.W.	S.W.	S.W.	S.W.	S.	S.W. & S.E.
Clear days	31	25	29	30	31	31	30	29	30	31	31	30
Fair days	0	6	2	1	0	0	1	2	1	0	0	1
Cloudy days	0	0	0	0	0	0	0	0	0	0	0	0
Days rain fell	1	0	1	0	0	0	0	1	0	0	1	1
Electric storms	0	0	0	0	0	0	0	0	0	0	0	0
Solar halos	0	0	0	0	0	0	0	0	0	0	0	1
Lunar halos	0	0	0	0	0	0	0	0	0	0	0	0
Number of days temperature above 90°	16	10	17	7	4	12	11	13	19	17	10	23

Character of Weather Conditions for August, as Shown by Observations of the Past Twelve Years.—Possible range of maxima temperatures between 108° in 1888 and 73° in 1878. Possible range of minima temperatures, between 74° in 1885 and 48° in 1887. Possible range of monthly mean temperatures, between 75° in 1879-1888 and 68° in 1881. Clear days, one day in 1904. Rain, one day in thirty-one, averaging a sprinkle. Cloudy (including rainy) days, no cloudy days in twelve years. Wind, hourly mean velocity, 6 miles per hour; prevailing direction, from the south.

September Weather in Sacramento, from 1877 to 1888.—The following table gives the monthly average barometer; the highest, lowest, and monthly range of barometer; the monthly average temperature; the highest, lowest, and monthly range of temperature; the greatest and least daily ranges of temperature; the monthly average, maximum, minimum, and range of temperature; the average relative humidity and dew point; total rainfall; the prevailing direction, total and maximum velocity of wind, with the direction at time of the maximum velocity; total number of clear, fair, and cloudy days, with number of days rain fell; solar and lunar halos; number of days the maximum temperature was above 90°:

SEPTEMBER:	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.
Average barometer.....	29.85	29.92	29.91	29.92	29.89	29.93	29.90	29.93	29.86	29.87	29.87	29.84
Highest barometer.....	30.10	30.12	30.05	30.06	30.16	30.19	30.05	30.16	29.97	30.04	30.04	30.04
Lowest barometer.....	29.70	29.77	29.77	29.73	29.61	29.77	29.72	29.62	29.74	29.77	29.65	29.58
Range of barometer.....	0.40	0.35	0.28	0.33	0.55	0.42	0.33	0.54	0.23	0.27	0.39	0.46
Average temperature.....	72.8	69.0	70.5	68.0	67.8	68.4	71.6	64.8	69.8	67.9	70.4	7.37
Highest temperature.....	98.0	92.0	96.0	92.0	96.1	99.6	101.0	93.5	98.5	96.0	100.0	106.0
Lowest temperature.....	49.0	48.0	52.0	48.0	50.0	44.4	52.9	49.0	50.5	49.0	45.7	50.5
Range of temperature.....	49.0	44.0	44.0	44.0	46.1	55.2	48.1	44.5	48.0	47.0	54.3	55.5
Greatest range of temperature.....	40.0	34.0	37.0	35.0	37.7	36.5	40.0	33.0	41.8	40.0	39.5	42.0
Least range of temperature.....	19.0	12.0	19.0	23.0	12.8	5.2	10.0	19.0	14.0	20.0	16.2	14.0
Mean maximum temperature.....	87.6	86.6	85.3	83.2	82.1	82.7	87.3	79.5	88.2	86.0	86.3	91.4
Mean minimum temperature.....	57.3	55.6	57.3	54.9	55.5	56.8	59.6	53.5	56.3	55.0	55.3	59.5
Mean range of temperature.....	30.3	26.0	28.0	28.3	26.6	25.9	27.7	26.0	31.9	31.0	31.0	31.9
Average humidity.....	43.0	51.0	54.4	54.9	52.8	59.4	57.6	63.4	52.6	59.0	53.3	56.2
Average dew point.....					48.5	52.0	54.6	51.2	49.4	51.5	50.9	54.3
Prevailing wind.....	S.	S.	S.	S.	S.E. & S.	S.E. & S.	S.	S.	S.	S.	N.W.	S.
Total precipitation.....	none	0.29	none	none	0.30	0.57	0.90	0.60	0.08	none	0.02	0.55
Total velocity of wind.....	4,069	4,651	3,395	4,014	4,794	3,905	3,657	4,847	4,408	3,304	4,052	4,033
Maximum velocity of wind.....	20	24	22	16	22	27	16	27	20	26	24	24
Direction of maximum velocity.....	N.W.	N.	N.W.	N.	N.W.	N.W.	S.W. & S.	N.W.	N.W.	N.W.	N.W. & S.W.	S.W. & N.E.
Clear days.....	30	23	23	28	26	26	24	27	27	30	23	24
Fair days.....	0	6	7	1	4	3	5	3	3	0	7	3
Cloudy days.....	0	1	0	1	0	1	1	0	0	0	0	3
Days rain fell.....	0	3	0	0	1	2	3	4	1	0	3	3
Electric storms.....	0	0	0	0	0	0	0	0	0	0	1	2
Solar halos.....	0	0	1	1	0	1	0	0	1	0	2	0
Lunar halos.....	0	0	0	0	0	0	0	0	0	0	0	0
Number of days temperature above 90°.....	12	4	10	4	5	8	8	1	11	9	10	17

Character of Weather Conditions for September, as Shown by Observations of the Past Twelve Years.—Possible range of maxima temperatures, between 106° in 1888 and 61° in 1882. Possible range of minima temperatures, between 79° in 1888 and 44° in 1884. Possible range of monthly mean temperatures, between 74° in 1888 and 65° in 1884. Clear days, one day in 12. Rain, one day in thirty, averaging .009 of an inch daily. Cloudy (including rainy) days, one day in thirty. Wind, hourly mean velocity, 6 miles per hour; most frequent direction, south.

October Weather in Sacramento, from 1877 to 1888.—The weather changes, etc., in the following review show the monthly average barometer; the highest, lowest, and monthly range of barometer; monthly average temperature; the highest, lowest, and monthly range of temperature; greatest and least daily range of temperature; highest, lowest, and range of temperature; mean maximum, minimum, and range of temperature; the average relative humidity and dew point; total rainfall; prevailing direction, total, and maximum velocity of wind, and the direction at the time of maximum velocity; total number of clear, fair, and cloudy days, with total number of days rain fell; solar and lunar halos; light frosts; number of days maximum temperature was above 90°:

OCTOBER :	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.
Average barometer.....	29.97	29.98	30.01	30.02	30.03	30.02	30.00	29.99	29.95	30.02	29.96	29.93
Highest barometer.....	30.16	30.23	30.28	30.23	30.28	30.28	30.31	30.19	30.14	30.28	30.21	30.13
Lowest barometer.....	29.83	29.68	29.63	29.74	29.79	29.80	29.62	29.74	29.68	29.80	29.74	29.76
Range of barometer.....	0.33	0.55	0.62	0.49	0.51	0.48	0.69	0.45	0.46	0.48	0.47	0.37
Average temperature.....	62.9	61.5	62.1	62.1	56.8	58.4	58.2	59.9	64.3	57.1	66.5	64.2
Highest temperature.....	88.0	86.0	87.0	85.0	81.0	76.8	81.0	80.5	98.0	85.1	92.0	91.5
Lowest temperature.....	38.0	40.0	40.0	46.0	36.4	38.8	42.2	42.0	40.0	38.5	42.0	40.0
Range of temperature.....	50.0	46.0	37.0	39.0	44.6	38.0	38.8	38.5	58.0	47.0	50.0	51.5
Greatest range of temperature.....	32.0	34.0	34.0	31.0	35.0	27.1	28.0	31.0	39.3	36.0	38.0	35.0
Least range of temperature.....	11.0	5.0	14.0	12.0	7.1	7.0	10.1	3.5	19.0	6.0	17.7	19.0
Mean maximum temperature.....	70.2	75.3	74.0	75.0	68.7	68.6	69.5	72.1	79.9	70.9	81.2	79.7
Mean minimum temperature.....	50.2	48.6	48.9	49.8	46.5	49.0	48.4	49.6	51.4	46.7	51.5	50.8
Mean range of temperature.....	20.0	26.7	25.1	25.2	22.2	19.6	21.1	22.5	28.5	24.2	29.6	28.9
Average humidity.....	49.0	54.0	63.1	54.3	62.6	72.5	71.2	71.2	62.3	69.7	46.0	62.0
Average dew point.....	N.	N.	S.	N.	S.	S.	S.	49.8	49.1	46.2	42.6	48.8
Prevailing wind.....	N.	N.	S.	N.	S.	S.	S.	S.E.&N.	N.W.	N.W.	N.W.	S.E.
Total precipitation.....	0.73	0.55	0.88	none	0.55	2.63	0.97	2.01	0.02	0.68	none	none
Total velocity of wind.....	4,044	4,078	3,977	3,556	4,538	3,897	3,988	3,495	3,761	3,583	4,624	4,682
Maximum velocity of wind.....	28	28	16	18	19	28	21	20	18	17	33	36
Direction of maximum velocity.....	N.&N.W.	N.	N.W.	S.W.&N.W.	S.W.&N.	S.E.	S.E.	S.W.	S.W.	N.W.	N.W.	N.W.
Clear days.....	27	28	23	23	22	19	19	26	20	22	28	28
Fair days.....	0	1	5	7	8	10	9	4	9	9	3	3
Cloudy days.....	4	2	3	1	1	2	3	1	2	0	0	0
Days rain fell.....	5	1	4	1	7	7	8	5	3	5	0	0
Solar halos.....	0	0	1	1	0	0	0	0	1	1	0	1
Lunar halos.....	0	0	1	0	0	0	0	1	0	0	0	0
Electric storms.....	0	0	0	0	0	0	0	0	1	0	0	0
Light frosts.....	2	1	0	0	3	8	10	3	0	0	0	2
Number of days temperature above 90°.....	0	0	0	0	0	0	0	0	4	0	4	1

Character of Weather Conditions for October, as Shown by Observations of the Past Twelve Years.—Possible range of maxima temperatures between 98° in 1885 and 50° in 1886. Possible range of minima temperatures between 64° in 1887 and 36° in 1881. Possible range of mean monthly temperatures between 66° in 1887 and 40° in 1888. Clear days, one day in 1.3. Rainy days, one day in eight, averaging .026 of an inch daily. Cloudy days, one day in eight. Wind, hourly mean velocity of 5 miles; most frequent direction, north.

November Weather in Sacramento, from 1877 to 1888.—This meteorological table shows the monthly average barometer; highest, lowest, and monthly range of barometer; monthly average temperature; the greatest and least daily range of temperature; mean maximum, minimum, and range of temperature; monthly average relative humidity and dew point; total precipitation; prevailing direction, total and maximum velocity of wind, and direction at the time of maximum velocity; total number of clear, fair, and cloudy days, and total number of days rain fell; solar and lunar halos; light and killing frosts; number of days the minimum temperature was below 32°:

NOVEMBER:	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.
Average barometer	30.11	30.09	30.10	30.16	30.16	30.12	30.13	30.08	29.98	30.15	30.04	30.01
Highest barometer	30.34	30.47	30.41	30.49	30.44	30.45	30.41	30.27	30.27	30.37	30.31	30.20
Lowest barometer	29.82	29.78	29.38	29.83	29.92	29.84	29.93	29.79	29.46	29.58	29.73	29.69
Range of barometer	0.52	0.69	1.03	0.66	0.52	0.61	0.48	0.48	0.81	0.79	0.58	0.51
Average temperature	54.7	55.5	50.9	49.7	50.8	49.5	50.5	55.3	54.4	50.4	54.7	53.6
Highest temperature	70.0	72.0	70.0	76.0	71.0	65.6	71.0	75.2	77.0	74.2	75.2	75.0
Lowest temperature	37.0	34.0	33.0	27.0	32.0	34.0	29.0	37.7	38.5	32.2	28.0	32.2
Range of temperature	33.0	38.0	37.0	49.0	39.0	31.6	42.0	37.5	38.5	42.0	47.2	42.8
Greatest range of temperature	27.0	31.0	28.0	36.0	28.1	22.6	28.0	29.5	28.2	34.2	35.5	35.0
Least range of temperature	8.0	10.0	8.0	7.0	8.0	41.8	6.6	16.0	4.3	6.2	10.0	4.0
Mean maximum temperature	62.6	65.3	60.6	60.7	61.1	57.8	62.1	67.6	61.6	63.0	67.5	64.2
Mean minimum temperature	44.4	43.2	41.0	38.0	40.1	41.3	40.1	44.7	48.2	38.6	41.6	43.9
Mean range of temperature	18.2	22.1	19.6	22.7	21.0	16.5	22.0	22.9	13.4	24.4	25.9	20.3
Average humidity	72.0	66.0	73.5	51.6	61.8	76.9	77.5	72.6	84.1	61.9	62.8	71.2
Average dew point					36.6	41.9	43.4	46.1	49.2	37.6	41.1	42.8
Prevailing wind	N.	N.	N.	N.	N.	N.W.	S.E.	N.	S.E.	N.W.	N.W.	S.E.
Total precipitation	1.07	0.51	2.05	0.05	1.88	3.22	0.61	none	11.34	0.21	0.45	4.28
Total velocity of wind	2,616	3,140	4,020	3,848	3,761	3,411	3,126	2,317	5,985	3,685	3,190	3,487
Maximum velocity of wind	23	32	36	28	24	32	25	22	36	36	27	21
Direction of maximum velocity	N.	N.	N.	N.	N.	N.W.	N.W.	S.E.	S.E.	N.W.	N.W.	N.W.
Clear days.	18	20	13	20	25	16	24	22	4	26	24	17
Fair days.	6	9	8	6	3	9	4	6	11	3	3	7
Cloudy days.	6	1	9	4	2	5	2	2	15	1	3	6
Days rain fell	8	3	9	2	4	7	3	0	21	2	4	9
Solar halos	0	0	0	0	0	0	0	1	0	0	0	0
Lunar halos	1	0	1	0	0	0	0	3	0	0	0	0
Light frosts	1	5	5	4	8	18	9	14	3	20	5	3
Killing frosts	0	3	4	12	3	0	6	0	0	2	3	0
Number of days temperature below 32°	0	0	0	9	0	0	2	0	0	0	2	0

Character of the Weather Conditions for November, as Shown by Observations of the Past Twelve Years.—Possible range of maxima temperatures between 77° in 1885 and 45° in 1880. Possible range of minima temperatures between 58° in 1885 and 27° in 1880. Possible range of mean monthly temperatures between 59° in 1878 and 59° in 1882. Clear days, one day in 1.5. Rainy days, one day in six, averaging .065 of an inch daily. Cloudy days, one day in 4.5. Wind, hourly mean velocity of 5 miles; most frequent direction, north.

December Weather in Sacramento, from 1877 to 1888.—The weather review in the following table shows the monthly average barometer; highest, lowest, and monthly range of barometer; the monthly average temperature; highest, lowest, and monthly range of temperature; the greatest and least daily range of temperature; the mean maximum, minimum, and range of temperature; the average relative humidity and dew point; total precipitation; prevailing direction, total, and maximum velocity of wind, with the direction at time of maximum velocity; total number of clear, fair, cloudy, and foggy days, and total number of days rain fell; solar and lunar halos; light and killing frosts; number of days the minimum temperature was below 32°.

DECEMBER:	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.
Average barometer	30.05	30.13	30.13	30.04	30.20	30.18	30.18	29.96	30.14	30.16	30.13	30.07
Highest barometer	30.38	30.51	30.68	30.46	30.41	30.38	30.49	30.30	30.35	30.40	30.35	30.33
Lowest barometer	29.66	29.78	29.47	29.48	29.88	29.77	29.72	29.49	29.77	29.86	29.50	29.49
Range of barometer	0.72	0.73	1.21	0.98	0.53	0.61	0.77	0.81	0.58	0.54	0.85	0.84
Average temperature	48.6	47.2	44.0	50.3	46.2	48.2	41.2	48.8	49.1	46.9	46.9	48.4
Highest temperature	67.0	66.3	63.0	63.0	62.0	68.0	67.0	65.0	64.7	65.2	65.0	63.0
Lowest temperature	32.0	23.5	25.0	38.0	31.9	27.0	24.0	27.0	37.7	32.0	29.0	36.0
Range of temperature	35.0	42.8	38.0	25.0	30.1	41.0	43.0	38.0	27.0	33.2	36.0	27.0
Greatest range of temperature	27.0	28.5	21.0	13.0	20.9	23.2	31.0	27.5	16.0	32.2	31.5	20.0
Least range of temperature	6.0	13.0	7.0	3.0	5.0	7.5	6.5	5.0	2.8	5.5	7.5	3.0
Mean maximum temperature	56.3	57.2	50.4	54.4	52.7	55.7	53.3	56.2	53.8	57.6	55.6	53.2
Mean minimum temperature	39.3	34.7	36.5	45.4	39.6	40.1	36.4	41.6	45.0	42.2	37.6	43.7
Mean range of temperature	17.0	22.5	13.9	9.0	13.1	15.6	16.9	14.6	8.8	15.4	18.0	9.5
Average humidity	74.0	55.0	84.0	87.9	85.5	82.4	88.5	71.1	90.3	82.9	77.6	91.1
Average dew point					41.7	42.6	40.7	38.9	40.2	43.8	39.7	45.8
Prevailing wind					S.E.	S.E.	S.E.	S.E.	S.E.	S.E.	S.E.	S.E.
Total precipitation	1.43	0.47	3.41	11.81	3.27	1.13	0.44	10.45	5.76	2.21	2.09	4.63
Total velocity of wind	3,187	4,031	4,928	6,453	3,717	3,544	2,845	7,817	4,458	3,291	5,064	3,447
Maximum velocity of wind	16	30	39	40	24	19	16	36	25	25	40	36
Direction of maximum velocity	S.	N.	S.	S.E.	S.E.	W.S.E. & S.W.	N.W.	N.W.	N.W.	S.E.	S.E.	S.E.
Clear days	13	22	11	3	15	16	17	13	11	12	15	5
Fair days	11	5	8	5	9	11	10	8	7	11	13	7
Cloudy days	7	4	12	23	7	4	4	10	13	8	3	18
Foggy days	0	0	4	3	5	1	8	0	3	0	0	0
Days rain fell	5	4	12	22	12	8	8	14	10	8	10	16
Days snow fell	0	0	0	0	0	1	0	0	0	0	0	0
Days solar halos	0	0	0	0	1	0	0	0	0	1	0	1
Lunar halos	0	0	0	0	0	0	0	0	0	0	0	0
Light frosts	6	7	2	0	7	13	4	13	5	3	3	4
Killing frosts	6	13	8	0	1	2	8	5	0	2	10	0
Number of days temperature below 32°	0	10	8	0	1	1	3	4	0	0	3	0

Character of Weather Conditions for December, as Shown by Observations of the Past Twelve Years.—Possible range of maxima temperatures, between 68° in 1882 and 37° in 1882. Possible range of minima temperatures between 56° in 1884 and 24° in 1878 and 1883. Possible range of mean monthly temperatures, between 50° in 1880 and 44° in 1879 and 1883. Clear days, one day in two. Rainy days, one in three, averaging .42 of an inch daily. Cloudy days, one day in three. Wind, hourly mean velocity of 6 miles, most frequent direction, southeast.

Comparative Winter Weather in Sacramento, from 1877-78 to 1888-89.—This table of winter comparisons shows the average, highest, lowest, and range of barometer; average, highest, lowest, and range of temperature; the average relative humidity, and the average dew point; total rainfall; and prevailing wind; total and maximum velocity, with the direction of wind at the time of maximum velocity; total number of clear, fair, cloudy, and foggy days, and total number of days rain fell; number of snow storms; solar and lunar halos; light and killing frosts; number of days the temperature was below 32°:

WINTER OF:	1877-78.	1878-79.	1879-80.	1880-81.	1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.
Average barometer.....	30.00	30.12	30.16	30.12	30.17	30.19	30.12	30.09	30.10	30.11	30.15	30.10
Highest barometer.....	30.38	30.51	30.68	30.46	30.52	30.74	30.58	30.43	30.40	30.51	30.63	30.37
Lowest barometer.....	29.46	29.77	29.47	29.48	29.75	29.68	29.42	29.49	29.32	29.54	29.50	29.49
Range of barometer.....	0.92	0.74	1.21	0.98	0.77	1.06	1.16	0.94	1.08	0.99	1.13	0.88
Average temperature.....	49.9	49.2	44.5	51.0	45.9	45.4	45.9	50.0	49.4	47.5	47.4	47.8
Highest temperature.....	67.0	73.5	64.0	67.0	62.8	71.7	71.0	70.0	72.7	67.0	75.0	76.0
Lowest temperature.....	27.0	23.5	25.0	35.0	29.0	22.0	21.0	27.0	27.5	30.0	19.0	31.0
Range of temperature.....	40.0	50.0	39.0	32.0	33.8	49.7	50.0	43.0	45.2	37.0	56.0	45.0
Average humidity.....	77.1	68.3	77.2	84.0	76.4	77.9	88.0	77.7	87.1	77.6	76.6	79.9
Average dew point.....					38.1	38.2	40.6	42.6	43.3	40.2	39.8	41.0
Prevailing wind.....	S.E.	N.	S.E.	S.E.	N.	S.E.	S.E.	N.W.	N.W.	S.E.	S.E.	S.E.
Total precipitation.....	18.74	7.53	6.88	23.01	7.56	4.47	8.33	13.10	14.00	9.61	7.47	5.11
Total velocity of wind.....	13,452	12,650	13,735	16,092	14,611	11,131	12,294	16,406	13,889	14,003	13,944	10,519
Maximum velocity of wind.....	36	33	39	40	32	36	33	36	44	33	40	36
Direction of maximum velocity.....	S.E.	N.	S.	S.E.	N.	N.W.	S.	N.W.	S.E.	N.W.	S.E.	N.W. & S.E.
Clear days.....	26	44	39	14	46	52	47	40	42	41	44	36
Fair days.....	28	31	17	26	26	30	25	28	29	29	32	36
Cloudy days.....	36	15	35	50	18	8	19	23	19	20	15	25
Foggy days.....	0	0	6	6	5	4	8	0	7	0	0	0
Days rain fell.....	39	23	29	46	30	16	26	28	26	28	33	25
Snow storms.....	0	1	1	0	2	3	0	0	0	0	3	0
Solar halos.....	0	0	1	1	3	0	3	0	0	0	1	1
Lunar halos.....	0	0	3	2	1	0	2	0	1	0	0	1
Number of light frosts.....	9	15	11	11	27	19	5	25	8	10	5	18
Number of killing frosts.....	12	26	17	0	11	28	25	5	6	15	24	12
Number of days temperature below 32°.....	5	17	17	0	5	23	11	4	4	4	15	7

Comparative Spring Weather in Sacramento, from 1878 to 1888.—The following table shows the average, highest, lowest, and range of barometer; average, highest, lowest, and range of temperature; average relative humidity and dew point; total precipitation; prevailing direction, total and maximum velocity of wind, with the direction at time of maximum velocity; total number of clear, fair, and cloudy days, and days that rain fell; solar and lunar halos; light and killing frosts; number of days the maximum temperature was above 90°, and the minimum below 32°:

SPRING OF:	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.
Average barometer	29.94	30.05	30.06	30.01	30.04	30.01	29.97	29.97	30.00	29.96	29.98
Highest barometer	30.39	30.33	30.36	30.41	30.38	30.43	30.30	30.37	30.35	30.37	30.48
Lowest barometer	29.56	29.73	29.55	29.68	29.71	29.62	29.51	29.52	29.63	29.65	29.64
Range of barometer	0.83	0.60	0.81	0.73	0.67	0.81	0.79	0.85	0.72	0.62	0.84
Average temperature	60.5	59.3	55.0	60.4	57.6	58.5	57.9	61.8	56.5	59.7	59.2
Highest temperature	91.0	91.0	86.0	88.8	94.6	98.0	85.0	98.0	94.0	98.0	90.0
Lowest temperature	40.0	38.0	29.0	37.0	34.1	39.8	39.0	39.0	37.7	39.0	37.0
Range of temperature	51.0	53.0	57.0	51.8	60.5	58.2	46.0	59.0	56.3	59.0	53.0
Average humidity	67.1	68.4	66.2	68.4	61.9	68.9	73.3	64.9	71.9	65.3	66.9
Average dew point					43.0	47.3	48.6	48.8	46.7	46.8	47.0
Prevailing wind	S.	S.E.	S.E.	S.	N.	S.	S.W.	S.W.	S.W.	N.W.	S.W.
Total precipitation	4.33	8.84	16.66	3.01	6.12	7.22	12.52	0.76	6.83	3.52	3.54
Total velocity of wind	13,992	14,530	19,653	14,966	17,774	15,825	18,168	16,070	17,759	17,211	16,810
Maximum velocity of wind	40	32	36	28	35	34	35	30	37	30	48
Direction of maximum velocity	N.	N.	N.	N.	N.	N.W.	S.	N.W.	N.W.	S.E. & N.W.	S.E.
Clear days	45	39	49	60	57	54	46	58	50	61	59
Fair days	28	34	24	22	19	26	23	28	30	25	23
Cloudy days	19	19	19	10	16	12	23	6	12	6	10
Days rain fell	21	32	27	16	25	24	27	11	26	17	19
Solar halos	1	1	3	0	1	5	5	0	6	5	2
Lunar halos	0	0	1	0	2	0	3	0	2	0	2
Number of light frosts	2	2	3	5	6	2	10	4	4	3	0
Number of killing frosts	0	0	3	0	0	0	0	0	0	0	0
Number of days temperature above 90°	1	1	0	0	2	2	0	4	1	3	0
Number of days temperature below 32°	0	0	1	0	0	0	0	0	0	0	0

Comparative Summer Weather in Sacramento, from 1878 to 1888.—The tabulated meteorological data below show the average, highest, lowest, and range of barometer; average, highest, lowest, and range of temperature; prevailing direction, total and maximum velocity of wind, with the direction at the time of maximum velocity; total number of clear, fair, and cloudy days; and number of days upon which rain fell; solar and lunar halos; light and killing frosts; total number of days maximum temperature was above 90°:

SUMMER OF:	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.
Average barometer	29.82	29.82	29.88	29.90	29.90	29.91	29.92	29.87	29.85	29.78	29.88
Highest barometer	30.12	30.08	30.19	30.14	30.10	30.20	30.14	30.12	30.06	30.06	30.21
Lowest barometer	29.63	29.62	29.58	29.70	29.72	29.63	29.73	29.64	29.65	29.50	29.63
Range of barometer	0.49	0.46	0.61	0.44	0.38	0.57	0.41	0.48	0.41	0.56	0.58
Average temperature	72.9	72.9	69.1	68.5	71.1	72.4	69.8	70.1	70.9	69.5	71.6
Highest temperature	100.5	103.0	98.0	98.6	99.8	103.5	100.0	105.0	105.0	100.0	107.5
Lowest temperature	49.0	51.0	49.0	48.0	51.2	49.8	52.9	51.5	51.5	47.0	48.5
Range of temperature	51.5	52.0	49.0	50.6	48.6	53.7	47.1	43.5	53.5	53.0	59.0
Average humidity	54.7	52.7	59.3	56.3	57.0	58.4	63.3	55.8	59.5	59.7	57.2
Average dew point	S.	S.	S.	S.	53.8	55.7	56.0	52.2	54.8	53.3	53.0
Prevailing wind	S.	S.	S.	S.	S.	S.	S.	S.	S.	S.	S.
Total precipitation	.00	0.13	spring.	0.50	0.10	.00	1.45	0.11	.00	spring.	0.08
Total velocity of wind	13,303	13,645	16,046	16,551	15,449	15,609	16,518	18,474	14,917	16,465	15,625
Maximum velocity of wind	20	26	22	22	28	31	24	25	42	30	36
Direction of maximum velocity	N.W.	N.	S.	S.W.	N.W.	N.W.	S.W.	S.	N.W.	S.W.	S.W.
Clear days	83	81	85	86	87	89	77	81	91	86	77
Fair days	9	11	7	5	4	3	9	10	1	6	11
Cloudy days	0	0	0	0	1	0	6	1	0	0	4
Days rain fell	0	3	2	3	2	0	8	3	0	1	10
Solar halos	0	0	0	0	1	3	0	2	0	0	8
Lunar halos	0	0	0	0	0	0	0	0	0	0	0
Number of days temperature above 90°	30	38	12	16	32	34	21	30	35	31	40

Comparative Fall or Autumn Weather in Sacramento, from 1877 to 1888.—The following comparative weather table shows the average barometer; highest, lowest, and range of barometer; average temperature; highest, lowest, and range of temperature; average relative humidity and dew point; total rainfall; prevailing direction, total and maximum velocity of wind, with the direction at time of maximum velocity; total number of clear, fair, and cloudy days, and number of days rain fell; solar and lunar halos; light and killing frosts; number of days maximum temperature was above 90°; number of days minimum temperature was below 32°:

FALL OF:	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.
Average barometer	29.97	29.99	30.00	30.04	30.03	30.02	30.01	30.00	29.93	30.01	29.91	29.96
Highest barometer	30.34	30.47	30.41	30.49	30.44	30.45	30.41	30.27	30.27	30.27	30.26	30.26
Lowest barometer	29.70	29.68	29.38	29.73	29.61	29.77	29.62	29.62	29.46	29.58	29.60	29.58
Range of barometer	0.64	0.79	1.03	0.76	0.83	0.68	0.79	0.65	0.81	0.79	0.66	0.62
Average temperature	63.4	62.5	60.9	59.9	58.5	58.8	60.1	60.0	62.8	58.5	63.9	63.8
Highest temperature	88.0	92.0	96.0	92.0	96.0	99.6	101.0	93.5	98.5	96.0	100.0	106.0
Lowest temperature	37.0	34.0	33.0	27.0	32.0	34.0	29.0	37.7	38.5	32.2	28.0	32.2
Range of temperature	51.0	58.0	63.0	65.0	64.0	65.6	72.0	55.8	60.0	63.8	72.0	73.8
Average humidity	54.3	54.4	65.2	54.9	58.4	69.6	68.8	69.1	66.3	64.5	54.0	63.1
Average dew point	S.	N.	S.	N.	N.	47.5	48.7	49.0	49.2	45.1	44.9	48.6
Prevailing wind	S.	N.	S.	N.	N.	N.W.	S.	N.&S.E.	S.E.	N.W.	N.W.	S.E.
Total precipitation	1.80	1.35	2.93	0.05	2.73	6.42	2.48	2.61	11.44	0.89	0.47	4.83
Total velocity of wind	10,699	11,269	10,492	11,518	12,993	12,213	10,771	10,459	14,214	10,635	11,866	12,203
Maximum velocity of wind	28	32	36	28	24	32	25	27	36	36	33	36
Direction of maximum velocity	N.W.	N.	N.	N.	N.	N.W.	N.W.	N.W.	S.E.	N.W.	N.W.	N.
Clear days	76	71	59	71	73	61	67	75	51	78	74	69
Fair days	6	16	20	14	15	22	18	13	23	12	13	13
Cloudy days	9	4	12	6	3	8	6	3	17	1	3	9
Days rain fell	13	7	13	2	12	16	14	9	25	7	7	12
Solar halos	0	0	2	2	0	1	0	1	2	1	2	1
Lunar halos	1	0	2	0	0	0	0	4	0	0	0	0
Number of light frosts	3	6	5	4	11	26	19	17	3	20	5	5
Number of killing frosts	0	3	4	12	3	0	6	0	0	2	3	0
Number of days temperature above 90°	12	4	10	4	5	8	8	1	15	9	14	18
Number of days temperature below 32°	0	0	0	9	0	0	2	0	0	0	2	0

Annual Weather Summary in Sacramento, from 1878 to 1888.—The accompanying table gives the average barometer, the highest, lowest, and range of barometer for each year; average temperature; highest, lowest, and range of temperature; greatest and least monthly range of temperature; average maximum, minimum, and range of temperature; average relative humidity and dew point; yearly precipitation; prevailing direction of wind; maximum velocity of wind, and direction at time of maximum velocity; number of clear, fair, cloudy, and foggy days, and number of days each year that rain fell; number of earthquakes, snow storms, and electric storms; number of solar and lunar halos, light and killing frosts; number of days the maximum temperature was above 90°, and total number of days the minimum temperature was below 32°.

ANNUAL WEATHER REVIEW FOR:	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.
Average barometer.....	29.95	30.00	30.03	30.03	30.03	30.03	29.99	29.98	29.99	29.98	29.97
Highest barometer.....	30.51	30.68	30.49	30.46	30.52	30.52	30.58	30.43	30.51	30.46	30.62
Lowest barometer.....	29.46	29.38	29.48	29.61	29.71	29.62	29.74	29.46	29.32	29.45	29.49
Range of barometer.....	1.05	1.30	1.01	0.85	0.81	1.12	1.16	0.97	1.19	1.01	1.13
Average temperature.....	61.3	60.3	57.2	59.2	58.5	58.8	58.8	61.2	58.8	59.9	60.9
Highest temperature.....	100.5	103.0	98.0	98.6	99.8	103.5	100.0	105.0	105.0	100.0	107.5
Lowest temperature.....	23.5	25.0	25.0	31.9	27.0	22.0	21.0	34.2	27.5	28.0	19.0
Range of temperature.....	77.0	78.0	73.0	66.7	72.8	81.5	79.0	70.8	77.5	72.0	88.5
Greatest range of temperature.....	50.0	49.0	49.0	46.7	55.2	55.8	46.0	58.0	52.8	58.7	56.5
Least range of temperature.....	21.0	33.7	25.0	27.0	31.6	35.7	30.0	33.2	33.2	35.2	27.0
Average maximum temperature.....	81.5	83.7	80.0	81.6	82.0	84.3	70.0	73.2	71.5	72.9	73.3
Average minimum temperature.....	41.2	41.2	39.9	42.1	40.1	39.8	49.7	51.8	49.1	47.7	49.4
Mean maximum and minimum temperature.....	61.4	62.4	59.9	61.8	61.0	62.0	59.8	62.5	60.3	60.3	61.4
Average range of temperature.....	40.3	42.5	40.1	39.5	41.9	44.5	38.8	40.7	42.6	46.2	45.8
Average humidity.....	62.2	65.7	64.6	66.7	66.0	69.0	70.7	67.8	70.1	63.7	67.1
Average dew point.....					45.7	47.3	48.5	48.8	47.8	46.0	47.6
Prevailing direction of wind.....	S.	S.	S.	S.	S.	S.	S.	S.	S.E.	N.W.	S.E.
Total precipitation.....	23.45	22.37	31.99	20.71	18.06	13.48	34.92	18.17	13.43	13.43	18.46
Total velocity of wind.....	52,830	52,214	62,497	57,846	58,874	52,437	62,611	62,405	56,036	61,322	56,964
Maximum velocity of wind.....	40	39	40	32	35	36	36	36	44	40	48
Direction of maximum velocity.....	N.	S.	S.E.	S.E.	S.E.	N.W.	N.W.	S.E.	S.E.	S.E.	S.E.
Total clear days.....	234	208	237	251	249	263	239	227	262	267	238
Total fair days.....	75	99	59	69	76	76	68	88	76	74	75
Total cloudy days.....	56	58	70	45	40	26	59	50	27	24	52
Total foggy days.....	0	4	5	8	1	11	0	0	4	0	0
Total days of precipitation.....	66	79	70	67	70	54	76	62	57	56	63
Number of earthquakes.....	2	0	0	1	0	0	0	2	1	1	2
Snow storms.....	0	1	1	0	3	2	2	0	0	0	3
Electric storms.....	4	4	3	4	4	2	2	6	3	2	3
Number of solar halos.....	1	3	6	2	5	8	9	4	8	8	13
Number of lunar halos.....	0	2	4	2	3	0	9	1	2	0	1
Number of light frosts.....	18	17	14	34	69	33	31	24	30	18	6
Number of killing frosts.....	22	27	32	4	12	40	22	0	10	26	14
Number of days temperature was above 90°.....	35	48	16	18	43	45	22	49	45	48	58
Number of days temperature was below 32°.....	15	14	17	1	5	27	13	0	4	9	12

Rainfall of Sacramento from September, 1849, to September, 1888.—The following table of rainfall, from September, 1849, to September 1, 1888, was collected from the records of Dr. T. M. Logan, Dr. F. W. Hatch, and those of the United States Signal Service:

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	Septem-ber.	October.	Novem-ber.	Decem-ber.	Total for Year.	Season of.	Total for Season.
1849	---	---	---	---	---	---	---	---	.25	1.50	2.25	12.50	---	1849-50	36.00
1850	4.50	.50	10.00	4.25	.25	none	none	none	none	none	2.14	spring.	19.50	1850-51	4.71
1851	.65	.35	1.88	1.14	.69	none	none	none	1.00	.18	7.07	spring.	15.10	1851-52	17.98
1852	.58	.12	6.40	.19	.30	none	none	none	spring.	none	6.00	spring.	27.00	1852-53	36.36
1853	3.00	2.00	7.00	3.50	1.45	spring.	spring.	none	spring.	spring.	1.54	spring.	19.99	1853-54	20.06
1854	3.25	8.50	3.25	1.50	.21	.31	none	spring.	spring.	1.01	.65	1.15	19.83	1854-55	18.62
1855	2.67	3.46	4.20	4.32	1.15	.01	none	none	spring.	none	.75	2.00	18.56	1855-56	13.76
1856	4.92	.69	1.40	2.13	1.84	.03	none	none	spring.	.20	.65	2.40	14.26	1856-57	10.46
1857	1.38	2.46	.68	spring.	spring.	.35	none	spring.	none	.66	2.41	2.63	12.91	1857-58	15.00
1858	2.44	2.86	2.88	1.21	.20	.10	.01	spring.	spring.	3.01	.15	4.34	16.80	1858-59	16.03
1859	.96	3.91	1.64	.98	1.04	none	none	none	.02	none	6.48	1.83	16.86	1859-60	22.09
1860	2.31	.93	5.11	2.87	2.49	.02	.63	none	.06	.91	.18	4.28	19.19	1860-61	16.10
1861	2.67	2.92	3.32	.48	.59	.14	.55	none	none	spring.	2.17	8.64	21.38	1861-62	35.56
1862	15.04	4.26	2.80	.82	1.81	.01	none	.01	none	.36	spring.	2.33	27.44	1862-63	11.58
1863	1.73	2.75	2.36	1.69	.36	none	none	none	spring.	none	1.49	1.82	12.20	1863-64	7.87
1864	1.08	.19	1.30	1.08	.74	.09	none	.08	spring.	.12	6.72	7.87	19.27	1864-65	22.51
1865	4.78	.71	.48	1.37	.46	none	spring.	none	.08	.48	2.43	.36	11.15	1865-66	17.93
1866	7.70	2.01	2.02	.48	2.25	.10	.02	none	none	spring.	2.43	9.51	26.52	1866-67	25.30
1867	3.44	7.10	1.01	1.80	.01	none	none	none	.01	none	3.81	12.85	30.03	1867-68	32.79
1868	6.04	3.15	4.35	2.31	.27	spring.	none	none	none	none	.77	2.61	19.50	1868-69	16.64
1869	4.79	3.63	2.94	1.24	.65	.01	none	none	spring.	2.12	.85	1.96	18.19	1869-70	13.57
1870	1.37	3.24	1.64	2.12	.27	spring.	spring.	spring.	none	.02	.58	.97	10.21	1870-71	8.47
1871	2.08	1.92	.69	1.45	.76	spring.	none	none	spring.	.21	1.22	10.89	18.92	1871-72	23.65
1872	4.04	4.74	.61	1.94	.28	.02	none	none	spring.	.22	1.93	5.39	19.17	1872-73	14.21
1873	1.23	4.36	.55	.51	none	spring.	.02	spring.	none	.31	1.21	10.01	18.20	1873-74	22.90
1874	5.20	1.86	3.05	.89	.37	spring.	spring.	none	.05	2.26	3.80	.44	17.92	1874-75	17.70
1875	8.70	.55	.80	spring.	spring.	1.10	none	none	none	.44	6.20	5.92	23.31	1875-76	26.53
1876	4.99	3.75	4.15	1.10	.15	none	.21	.02	spring.	3.45	.30	none	18.12	1876-77	8.96
1877	2.77	1.04	.56	.19	.64	.01	spring.	spring.	none	.73	1.07	1.43	8.44	1877-78	24.86
1878	9.26	8.04	3.09	1.07	.17	none	none	none	.29	.55	.51	.47	23.45	1878-79	17.85
1879	3.18	3.88	4.88	2.66	1.30	.13	spring.	spring.	none	.88	2.05	3.41	22.37	1879-80	26.47
1880	1.64	1.83	1.70	14.20	.76	none	spring.	none	none	none	.05	11.81	31.39	1880-81	26.57
1881	6.14	5.06	1.37	1.64	spring.	.50	spring.	none	.30	.55	1.88	3.27	20.71	1881-82	16.51
1882	1.89	2.40	3.78	1.99	.35	.10	spring.	none	.57	2.63	3.22	1.13	18.06	1882-83	18.11
1883	2.23	1.11	3.70	.67	2.85	none	none	none	.90	.96	.61	.44	13.48	1883-84	24.78
1884	3.43	4.46	8.14	4.32	.06	1.45	none	spring.	.60	2.01	none	10.45	34.92	1884-85	16.58
1885	2.16	.49	.08	.68	spring.	.11	spring.	none	.08	.02	11.34	5.76	20.72	1885-86	32.27
1886	7.95	.29	2.68	4.08	.07	none	none	none	none	.68	.21	2.21	18.17	1886-87	13.97

1887	1.12	6.28	.94	2.53	sprin.	none	none	sprin.	sprin.	.02	none	.45	2.03	13.43	1887-88	11.56
1888	4.81	.57	3.04	.10	.40	.08	none	sprin.	sprin.	.55	none	4.28	4.63	18.46	1888-89	*19.65
1889*	.15	.33	6.25	.26	3.20											
Totals	148.27	110.64	118.05	74.17	26.19	4.67	1.14	.11	.11	4.78	26.48	84.74	181.12	757.13		763.87
Averages	3.707	2.766	2.951	1.902	0.672	0.120	0.029	0.003	0.003	0.120	0.662	2.118	4.528	19.414		19.586

* Up to May 7, 1889.

HEAVY RAINFALLS AT SACRAMENTO.

The following data from the Signal Service records show the greatest precipitation in any consecutive twenty-four hours for each year from 1877 to date:

YEAR.	Month and Date.	Total Amount.
1877.....	November eleventh.....	0.81 inches.
1878.....	January fifteenth.....	1.63 inches.
1879.....	March fifth.....	1.97 inches.
1880.....	April twenty-first.....	7.24 inches.
1881.....	January twenty-ninth.....	2.66 inches.
1882.....	October third.....	1.82 inches.
1883.....	January first.....	1.90 inches.
1884.....	March eighth and ninth.....	2.94 inches.
1885.....	November seventeenth and eighteenth.....	4.29 inches.
1886.....	January twenty-third.....	2.50 inches.
1887.....	February fourth and fifth.....	2.48 inches.
1888.....	January second and third.....	1.90 inches.
1889.....	March twelfth and thirteenth.....	2.57 inches.
1889*.....	May fourth and fifth.....	2.42 inches.

*Up to May 7, 1889.

MONTHLY WEATHER SUMMARY AT SACRAMENTO FOR 1888.

January—The average monthly mean temperature was 42.8°. The normal for thirty-four years is 47°, showing this month to have been 4.8° colder than the average for many years; in fact, a monthly mean temperature of 42.8° for January has never occurred here before; the lowest mean temperature was 43°, in 1854, which was the coldest month of that name, with the exception of this one, ever known since records were kept. The lowest temperature in January, 1854, was 19°, at 8 A. M., by Dr. Logan, although other thermometers indicated 17°. This month the lowest was 19° by the Signal Office records; 18° by Captain Foster, corner Eleventh and F Streets, and 16° by S. H. Gerrish, 1517 G Street. There was snow on the 4th, 5th, and 16th—1½ inches on the 4th, 2½ inches on the 5th, and a trace on the 16th. Mr. Gerrish reports snow fell in previous Januarys as follows: 1862, .75 of an inch; 1868, 1.62 inches; 1880, about one quarter of an inch. Highest and lowest temperature this month, 63° and 19°. Total precipitation, 4.81 inches.

February—Average temperature, 52.6°, being 1.8° warmer than the normal; the highest and lowest was 75° and 54°. Total rainfall, .57 of an inch, being 2.32 inches less than the average for many years. This month was extraordinarily warm and mild. Clear days, 21; fair, 7; cloudy, 1; and days rain fell, 15.

March—Average temperature, 54°, being 1° cooler than the usual March average. Highest and lowest temperature, 76° and 37°. Total precipitation, 3.04 inches, being .23 of an inch in excess of the average. Severe gales of wind during the month, reaching an extreme velocity of sixty miles per hour, and uprooting several trees in Capitol Park. Clear days, 17; fair, 8; cloudy, 9; and days rain fell, 9.

April—The mean temperature for this month was 62°, being 3° warmer than the normal or average temperature as deduced from a record of many years. The highest and lowest temperature was 89° and 43°. The rainfall was .10 of an inch, being 1.85 inches less than the normal or average precipitation. The two driest Aprils on record are those of 1857 and 1875,

when but a sprinkle of a few drops occurred. Clear days, 23; fair, 5; cloudy and days rain fell, 2.

May—Mean temperature, 62°, being 2° warmer than the normal or average temperature. The coldest May was in 1860, 58°, and the warmest was that of 1865, 70°. The highest and lowest temperature this month was 90° and 46°. The rainfall was .40 of an inch, being .28 of an inch less than the normal precipitation. The wettest May that of 1883, 2.85 inches. The coolness of this month helped the grain and other crops materially, and the absence of severe north wind was favorable to growing crops. Clear days, 19; fair, 10; cloudy, 2; and 4 upon which rain fell.

June—Mean temperature, 68°, being 2° cooler than the normal or average of many years. The highest and lowest temperature was 96° and 48°. The rainfall was .08 of an inch, being .04 of an inch less than the average precipitation. Clear days, 17; fair, 9; cloudy, 4; and 7 upon which rain was precipitated. This month was unusually cool, there being but two days on which a temperature above 90° was recorded, while the average is five. There were more solar halos, parhelia, and other atmospheric phenomena than were ever before recorded in ten years past, and less dry days than were ever recorded in the same number of years. Days of maximum temperature above 90°, 2.

July—Mean temperature, 72°, being 1° cooler than the average for many years. The highest and lowest temperature was 104° and 51°. Rainfall, a sprinkle, being .03 of an inch less than the normal precipitation. Clear days, 29; fair, 2; cloudy, none; and days that rain fell, 2; days highest temperature above 90°, 15.

August—Mean temperature, 75°, being 3° warmer than the average or normal, as deduced from a record of many years. Highest and lowest temperature, 108° and 51°. Rainfall, inappreciable in amount, being about the same as is usually precipitated during this month. Clear days, 30; fair, 1; cloudy, none; and days that rain fell, 1. Number of days temperature above 90°, 23, being the greatest number of clear days ever recorded in 11 years past. The greatest before this was 18, in 1885, and the least, 5, in 1887.

September—The hottest September ever recorded in 11 years past. Mean temperature, 74°, being 5° warmer than the average of 35 years. The highest, 106°, and lowest, 50°. Rainfall, .55 of an inch, being .44 of an inch more than the average or normal precipitation, as deduced from a record of many years. Clear days, 24; fair, 3; cloudy, 3; and 2 upon which rain was precipitated. Number of days with a temperature above 90°, 17; eight of these reaching 100° and over. There were four separate and distinct thunder storms in a little over one day, something unknown to the oldest inhabitant.

October—Mean temperature, 64°, being 2° warmer than the average for many years. Highest and lowest temperature, 92° and 40°. There was no rainfall this month, while the average precipitation of 35 years' observations is .69 of an inch. Clear days, 28; fair, 3; days temperature above 90°, 1.

November—Mean temperature, 54°, being 1° warmer than the average. Highest and lowest temperature, 75° and 32°. Rainfall, 4.28 inches, being 2.22 inches above the average precipitation. Clear days, 17; fair, 7; cloudy, 6; and days rain fell, 9.

December—Mean temperature, 48°, being 1° warmer than the average of many years. Rainfall, 4.63 inches, being .11 of an inch above the average or normal precipitation, as deduced from a record of 35 years. Clear days,

5; fair, 8; cloudy, 18; and days that rain fell, 14. Highest and lowest temperature, 63° and 36° .

The mean temperature for the year 1888 is 60.6° , or about 0.4° higher than the average of many years. The above data show that the mean monthly temperature was below the average for January, March, June, July, and above the average in February, April, May, August, September, October, November, and December. Highest and lowest temperature during the year was 108° and 19° .

SUMMARY FOR JANUARY, FEBRUARY, AND MARCH, 1889.

January—Mean temperature, 45° , being 2° cooler than the average of many years. Highest and lowest temperature, 62° and 44° . Rainfall, .15 of an inch, being 3.56 inches less than the average of 40 years. In fact, it was the driest January ever known in that length of time. Clear days, 18; fair, 9; and cloudy, 4.

February—Mean temperature, 50.3° , being one half (0.5) of a degree cooler than the average of many years. The highest and lowest temperature was 76° and 31° . Rainfall, .33 of an inch, being 2.44 inches behind the average of 40 years. Clear days, 13; fair, 12; and cloudy, 3.

March—Mean temperature, 57° , being 2° warmer than the average of 35 years past. The highest and lowest temperature was 76° and 41° . Rainfall, 6.25 inches, being 3.30 inches in excess of the average of 40 years. There were two thunder and lightning storms, one quite severe, giving twelve bright flashes of forked lightning, and peals of thunder. One light frost, on the 19th. There were 6 clear days, 12 fair, and 13 cloudy ones.

Average Monthly Temperature from 1854 to 1889, for Sacramento.—From the records of Dr. Logan, S. H. Gerrish, and the U. S. Signal Office:

Year.	January.	February.	March.	April.	May.	June.	July.	August.	Sept.	October.	Nov.	Dec.
1854	43.0	51.0	53.0	60.0	62.0	67.0	80.6	69.5	65.0	60.0	55.0	47.9
1855	43.7	52.5	54.8	58.1	60.2	71.1	72.5	73.0	68.0	63.0	50.6	46.0
1856	48.0	52.6	57.0	58.8	63.9	71.1	75.1	69.6	70.9	58.0	52.2	43.9
1857	48.5	50.2	56.4	63.3	65.5	71.9	71.4	70.3	67.9	61.5	53.2	47.4
1858	45.0	52.2	53.7	59.8	65.2	69.4	70.8	70.6	68.9	59.5	54.2	44.5
1859	44.9	50.5	51.5	57.1	63.0	74.8	69.1	67.2	65.9	63.3	54.0	43.5
1860	46.2	49.8	53.3	57.8	58.5	65.6	73.2	73.5	67.6	59.8	53.5	43.5
1861	47.1	52.2	55.0	60.6	63.7	66.2	73.6	69.7	67.8	59.9	53.6	50.9
1862	46.4	47.5	53.6	58.0	61.2	69.3	73.2	75.0	70.4	67.6	53.1	46.4
1863	46.9	48.0	57.6	59.5	67.1	69.1	75.6	70.7	69.0	62.8	52.7	46.5
1864	49.2	53.6	56.1	62.1	68.5	71.1	74.8	74.7	69.8	64.5	53.5	50.2
1865	47.4	49.0	53.6	59.3	70.2	73.5	74.0	71.7	68.8	63.1	56.9	44.1
1866	46.5	63.5	54.2	61.9	63.1	72.2	76.2	76.0	72.2	65.2	53.8	50.2
1867	48.2	47.8	50.7	59.7	64.4	70.3	73.7	71.7	68.8	62.7	54.8	46.8
1868	47.0	50.5	55.0	60.1	64.2	69.5	73.8	71.2	68.3	62.0	53.9	47.0
1869	47.6	49.9	53.6	59.0	64.2	70.8	74.3	71.3	69.9	63.1	54.0	46.5
1870	48.6	51.1	53.0	57.0	61.0	69.3	71.8	72.6	68.0	63.6	53.4	45.5
1871	48.3	47.4	56.0	59.2	61.5	70.1	70.2	72.0	67.4	62.2	50.2	48.7
1872	48.5	53.3	56.8	57.6	67.0	69.2	71.4	73.1	68.8	58.9	51.2	49.0
1873	52.7	48.2	56.8	60.0	67.9	71.7	73.2	66.3	69.9	61.4	57.5	47.7
1874	45.7	49.3	52.9	59.5	64.7	70.2	72.8	70.9	70.7	61.7	53.9	45.0
1875	46.9	52.7	58.7	63.0	68.1	70.6	73.3	72.5	65.7	69.9	56.7	48.0
1876	48.8	50.2	54.6	59.5	65.7	76.9	74.0	72.8	70.1	63.5	53.3	45.5
1877	49.1	55.0	59.0	60.2	64.5	72.5	75.0	72.9	72.8	62.9	54.7	48.6
1878	49.7	51.3	56.7	59.4	65.5	71.8	73.4	73.4	69.0	62.9	55.5	47.2
1879	45.5	55.0	57.4	60.3	60.2	72.1	71.8	74.7	70.5	61.5	50.9	44.0
1880	43.5	46.0	48.8	54.6	61.6	66.6	70.9	69.7	68.0	62.1	49.7	50.3
1881	49.2	53.5	55.5	60.9	64.8	66.2	71.1	68.2	67.8	56.8	50.8	46.2
1882	45.1	46.3	53.0	55.8	64.0	68.1	73.4	71.9	68.4	58.4	49.5	48.2
1883	41.9	46.0	56.9	56.0	62.6	72.6	73.1	71.4	71.6	58.2	50.5	44.2
1884	46.6	46.9	52.9	56.7	64.0	65.8	71.2	72.5	64.8	59.9	55.3	48.8
1885	47.1	54.0	59.1	60.6	65.7	66.2	71.0	73.0	69.8	64.3	54.4	49.1
1886	45.7	53.3	52.1	55.5	62.0	69.0	72.0	71.6	67.9	57.1	50.4	49.2
1887	48.5	44.7	57.8	58.3	62.9	69.1	70.2	69.1	70.4	66.5	54.7	46.9
1888	42.8	52.6	53.6	62.3	61.8	67.7	71.6	75.4	73.7	64.2	53.6	48.4
1889	44.6	50.3	57.0	60.4								
Totals	1884.4	1829.9	1977.7	2131.9	2240.4	2448.6	2553.3	2510.7	2414.5	2172.0	1805.2	1651.6
Average for 35 years.	*46.8	*50.8	*54.9	*59.2	64.0	70.0	72.0	71.7	69.0	62.1	53.3	47.2

* Average for 36 years.

AVERAGE ANNUAL AND SEASONAL TEMPERATURE IN SACRAMENTO.

The statement below shows the average temperature, for each year, for thirty-six years; also the spring, summer, autumn, and winter temperature for the same time. The coldest year, inferring from the average temperature, was that of 1880, 57.2°; the warmest was 1864, 62.8°; the mean average for the past thirty-six years, 60.2°, showing the coldest to have been 3° below the mean average, while the warmest year was that of 1864, when it was 2.6° above the mean average of thirty-six years. By careful study of the table, there will be noticed but a slight difference between the coldest and the warmest year, as compared with an average of thirty-six years; generally not more than 3°. Therefore, we might safely say that the average temperature of any year is not likely to vary more than 3° from 60° either way, between the hottest and coldest year, as compared with the mean average temperature of many years:

YEAR.	Mean Annual Temperature.	Mean Spring Temperature.	Mean Summer Temperature.	Mean Autumn Temperature.	Mean Winter Temperature.	
1853.....	62.6	62.9	74.3	69.0	1853-54.....	43.7
1854.....	59.5	58.3	72.4	60.0	1854-55.....	48.0
1855.....	59.5	57.7	72.2	60.5	1855-56.....	48.9
1856.....	60.1	59.9	71.9	60.4	1856-57.....	47.5
1857.....	60.7	61.7	71.5	60.9	1857-58.....	48.2
1858.....	59.5	59.6	70.3	60.9	1858-59.....	46.6
1859.....	58.7	57.2	70.4	61.1	1859-60.....	46.5
1860.....	59.0	56.5	70.8	60.3	1860-61.....	49.5
1861.....	60.1	59.8	69.8	60.4	1861-62.....	48.3
1862.....	62.2	57.6	72.5	63.7	1862-63.....	47.1
1863.....	60.3	61.4	71.8	61.5	1863-64.....	49.8
1864.....	62.8	62.2	73.5	62.6	1864-65.....	48.9
1865.....	61.0	61.0	73.1	62.9	1865-66.....	51.4
1866.....	62.1	59.7	74.8	63.7	1866-67.....	48.7
1867.....	59.9	58.3	71.9	62.1	1867-68.....	48.1
1868.....	60.1	59.8	71.5	61.4	1868-69.....	48.2
1869.....	60.4	58.9	72.1	62.3	1869-70.....	48.7
1870.....	59.6	57.0	71.2	61.7	1870-71.....	47.7
1871.....	59.6	58.9	70.8	59.9	1871-72.....	50.2
1872.....	60.4	60.5	71.6	59.6	1872-73.....	50.0
1873.....	60.7	61.6	70.4	62.9	1873-74.....	47.6
1874.....	59.8	59.0	71.3	62.1	1874-75.....	48.2
1875.....	62.5	63.3	72.1	64.1	1875-76.....	49.0
1876.....	61.7	59.9	74.6	62.3	1876-77.....	49.9
1877.....	61.2	61.2	73.5	63.4	1877-78.....	49.9
1878.....	61.3	60.5	72.9	62.5	1878-79.....	49.2
1879.....	60.3	59.3	72.9	60.9	1879-80.....	44.5
1880.....	57.2	55.0	69.1	59.9	1880-81.....	51.0
1881.....	59.2	60.4	68.5	58.5	1881-82.....	45.9
1882.....	58.5	57.6	71.1	58.8	1882-83.....	45.4
1883.....	58.8	58.5	72.4	60.1	1883-84.....	45.9
1884.....	58.8	57.9	69.8	60.0	1884-85.....	50.0
1885.....	61.2	61.8	70.1	62.8	1885-86.....	49.4
1886.....	58.8	56.5	70.9	58.5	1886-87.....	47.5
1887.....	59.9	59.7	69.5	63.9	1887-88.....	47.4
1888.....	60.6	59.2	71.6	63.8	1888-89.....	47.8
Totals.....	2166.6	2140.3	2578.6	2219.6	.....	1738.2
Averages for 36 years.....	60.2	59.5	71.6	61.6	.....	48.3

RAINFALL FOR SPRING, SUMMER, AUTUMN, WINTER, AND TOTAL FOR EACH YEAR, AT SACRAMENTO.

The following table gives the rainfall for each season of spring, summer, autumn, and winter; also the total rainfall for each year and for each season. The table shows the annual rainfall for each year, beginning with the year 1850, and the total for each season, beginning with that of 1849-50. The rainfall for the winter seasons begins with the winter of 1849-50, and ends with the winter of 1888-89, making a total of forty winters:

YEAR.	Rainfall for Spring.	Rainfall for Summer.	Rainfall for Autumn.	Rainfall for Winter	Annual Rainfall.	Season of.	Inches.
1849.....			4.00		*16.50	1849-50.....	36.00
1850.....	14.50	none	spring.	17.80	19.50	1850-51.....	4.71
1851.....	3.71	none	3.32	1.00	15.10	1851-52.....	17.98
1852.....	6.89	none	6.00	7.77	27.00	1852-53.....	36.36
1853.....	11.95	spring.	1.50	18.41	19.99	1853-54.....	20.06
1854.....	4.96	.51	1.66	13.29	19.83	1854-55.....	18.62
1855.....	9.67	.01	.75	7.28	18.56	1855-56.....	13.76
1856.....	5.37	.03	.85	7.61	14.26	1856-57.....	10.46
1857.....	.68	.35	3.06	8.58	12.91	1857-58.....	15.00
1858.....	4.29	.11	3.16	7.53	16.80	1858-59.....	16.03
1859.....	3.66	none	6.50	9.21	16.86	1859-60.....	22.09
1860.....	10.47	.05	1.15	5.07	19.19	1860-61.....	16.10
1861.....	4.39	.69	2.17	9.87	21.38	1861-62.....	35.56
1862.....	5.43	.02	.36	27.94	27.44	1862-63.....	11.58
1863.....	4.41	none	1.49	6.81	12.20	1863-64.....	7.87
1864.....	3.12	.17	6.84	3.09	19.27	1864-65.....	22.51
1865.....	2.31	spring.	2.99	13.36	11.15	1865-66.....	17.93
1866.....	4.75	.12	2.43	10.07	26.52	1866-67.....	25.30
1867.....	2.82	none	3.82	20.05	30.03	1867-68.....	32.79
1868.....	6.93	spring.	.77	22.04	19.50	1868-69.....	16.64
1869.....	4.83	.01	2.97	11.03	18.19	1869-70.....	13.57
1870.....	4.03	spring.	.60	6.57	10.21	1870-71.....	8.47
1871.....	2.90	spring.	1.43	4.97	19.32	1871-72.....	23.65
1872.....	2.83	.02	2.15	19.47	19.17	1872-73.....	14.21
1873.....	1.06	.02	1.52	11.08	18.20	1873-74.....	22.90
1874.....	4.31	spring.	6.11	17.07	17.92	1874-75.....	17.70
1875.....	.80	1.10	6.64	9.69	23.31	1875-76.....	26.53
1876.....	5.40	.23	3.75	14.26	18.12	1876-77.....	8.96
1877.....	1.39	.01	1.80	3.81	8.44	1877-78.....	24.86
1878.....	4.33	none	1.35	18.73	23.45	1878-79.....	17.85
1879.....	8.84	.13	2.93	7.53	22.37	1879-80.....	26.47
1880.....	16.66	spring.	.05	6.88	31.99	1880-81.....	26.57
1881.....	3.01	.50	2.73	23.01	20.71	1881-82.....	16.51
1882.....	6.12	.10	6.42	7.56	18.06	1882-83.....	18.11
1883.....	7.22	none	2.48	4.47	13.48	1883-84.....	24.78
1884.....	12.52	1.45	2.61	8.33	34.92	1884-85.....	16.58
1885.....	.76	.11	11.44	13.10	20.72	1885-86.....	32.27
1886.....	6.83	none	.89	14.00	18.17	1886-87.....	13.97
1887.....	3.52	spring.	.47	9.61	13.43	1887-88.....	11.56
1888.....	3.54	.08	4.83	7.47	18.46	1888-89.....	†19.65
1889.....				5.11			
Totals.....	211.21	5.62	115.99	440.23	757.13		763.87
Average.....	5.414	.144	2.900	11.006	19.414		19.587

* Rainfall for September, October, November, and December, 1849. † Up to May 7, 1889.

HIGHEST, LOWEST, AND AVERAGE TEMPERATURE, WITH PREVAILING WIND, AT SACRAMENTO.

The following table shows the highest, lowest, and average yearly temperature, along with the prevailing direction of wind, for each year. This data is from the records of Dr. Thomas M. Logan, the Railroad Company, Mr. Samuel H. Gerrish, and the records of the United States Signal Office. The records cover a period of thirty-six years. It shows that a very low temperature is never recorded at this point. Often several years will intervene without the temperature falling to the freezing point. The lowest recorded temperature is 19°, in January, 1854, and January, 1888; the highest, 108°, in August, 1888. The prevailing direction of wind for the year is usually from the south:

YEAR.	Highest Temperature.	Lowest Temperature.	Average Annual Temperature.	Prevailing Direction of Wind for Each Year.
1853.....	97	32	62.6	N.W.
1854.....	102	19	59.5	N.W.
1855.....	100	25	59.5	N.W.
1856.....	100	32	60.1	S.E.
1857.....	98	31	60.7	S.E.
1858.....	97	29	59.5	S.
1859.....	96	34	58.7	S.
1860.....	90	37	59.0	S.
1861.....	87	36	60.1	S.
1862.....	94	32	62.2	N.W.
1863.....	95	34	60.3	N.W.
1864.....	96	34	62.8	S.E.
1865.....	94	31	61.0	S.E.
1866.....	98	33	62.1	S.E.
1867.....	99	28	59.9	S.
1868.....	100	30	60.1	S.
1869.....	102	31	60.4	S.
1870.....	106	21	59.6	S.
1871.....	102	30	59.6	S.
1872.....	100	26	60.4	N.
1873.....	105	31	60.7	S.
1874.....	96	33	59.8	S.
1875.....	100	33	62.5	S.
1876.....	98	30	61.7	S.
1877.....	103	31	61.2	S.
1878.....	101	24	61.3	S.
1879.....	103	25	60.3	S.
1880.....	98	25	57.2	S.
1881.....	99	32	59.2	S.
1882.....	100	27	58.5	S.
1883.....	104	22	58.8	S.
1884.....	100	21	58.8	S.
1885.....	105	34	61.2	S.
1886.....	105	28	58.8	S.E.
1887.....	100	28	59.9	N.W.
1888.....	108	19	60.6	S.E.

Highest temperature in 36 years, 108°, in August, 1888.

Lowest temperature in 36 years, 19° in January, 1854, and 19° in January, 1888.

Average annual temperature for 36 years, 60.2°.

General prevailing direction of wind, from the south.

SACRAMENTO "RIVER RECORD," AT SACRAMENTO.

The following table shows the highest and lowest water in the river for each season from 1849 to 1861-2, and 1873-4 to April 1, 1888-9. From 1862-3 to 1872-3, both seasons inclusive, the figures are missing. The zero of the gauge was put down in September, 1849, to the lowest water at the lowest point of ebb tide, and from that the high and low water records commence. This zero point of the gauge is 5 feet above the sea level, and 29 feet below the Central Pacific Railroad track, according to a circular issued March 15, 1875, by the Chief Signal Officer at Washington, D. C. This circular says when the river shows 25 feet on the gauge it is then near the danger line, and at that height it is dangerous to levees within 20 miles of Sacramento. The same circular gives the beginning of the danger line for Oroville as 10 feet; at that point it threatens danger to Marysville and all country below Oroville. The danger line at Marysville begins at about 15 feet, and is then dangerous to levees. At Red Bluff 20 feet is the danger line and 22 feet floods the bottoms. The danger line begins at Folsom City at 30 feet:

Highest, Lowest, and Range of Water in the Sacramento River for each Season, from 1849-50 to 1861-2, and from 1873-4 to date.

	Highest Water— feet and tenths.	Lowest Water— feet and tenths.	Range of Water—feet and tenths.
1849-50	20.3	zero of gauge	20.8
1850-51	9.7	zero of gauge	9.7
1851-52	20.0	zero of gauge	20.0
1852-53	21.7	2.2	19.5
1853-54	20.3	0.3	20.0
1854-55	20.3	3.0	17.3
1855-56	12.3	3.3	9.0
1856-57	18.3	zero of gauge	18.3
1857-58	18.7	1.4	17.3
1858-59	19.0	1.3	17.7
1859-60	15.3	1.3	14.0
1860-61	21.7	3.0	18.7
1861-62	24.0	2.4	21.6
1873-74	22.5	4.6	17.9
1874-75	22.2	4.3	17.9
1875-76	24.6	7.1	17.5
1876-77	18.2	5.2	13.0
1877-78	26.0	5.3	20.7
1878-79	23.3	5.5	17.8
1879-80	24.4	5.8	18.7
1880-81	26.6	7.4	19.2
1881-82	21.3	6.4	14.9
1882-83	20.7	6.5	14.2
1883-84	23.5	6.5	17.0
1884-85	24.6	7.5	17.1
1885-86	25.6	7.3	18.3
1886-87	20.5	7.5	13.0
1887-88	20.0	7.2	12.8
1888-89	* 25.6	7.0	18.6

* Up to May 1, 1889.

NOTE.—The record from 1849-50 was taken from Dr. Thomas M. Logan's report. The gauge was put down in September, 1849, at the lowest stage of water. At that time there was from 23 to 24 feet of water in the channel, the water was clear, and the rise and fall of the tide amounted to several feet. The lowest water since 1874 shows 4.3 feet above the lowest water of 1849, the zero point of the gauge. If the river had not been filled with slickens, that would indicate over 20 feet of water in the channel; the real fact shows scarcely five feet, with bars too numerous to mention. The river bed has therefore been raised upwards of 20 feet or more by debris.

DAILY NORMAL TEMPERATURE AT SACRAMENTO.

The following table of normal temperatures for each day of each month, at Sacramento, California, as deduced from three daily observations for nine years, from July, 1877, to December, 1885, inclusive, were prepared at the Chief Signal Office, Washington, D. C., by authority of the Chief Signal Officer:

DATE.	*Jan.	*Feb.	*Mar.	*April.	*May.	*June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	44.2	49.4	55.8	57.7	61.6	69.2	72.3	73.1	73.0	62.3	57.2	50.6
2	45.6	49.5	55.5	58.0	61.7	69.2	71.4	74.0	72.4	62.7	55.6	50.6
3	45.3	49.0	54.0	56.5	62.6	68.8	70.8	73.2	72.5	63.6	*56.5	49.6
4	45.5	49.7	53.4	†57.7	61.2	68.5	71.2	71.9	73.4	64.0	55.5	50.2
5	47.2	48.0	54.8	58.0	61.5	69.4	71.4	72.8	71.8	63.7	56.2	50.6
6	45.9	47.6	54.4	58.3	61.6	68.2	71.5	73.7	69.9	62.7	56.6	49.4
7	46.7	46.0	53.9	58.4	61.4	67.9	70.7	73.9	70.3	62.9	56.9	47.7
8	47.6	47.1	53.7	60.1	62.5	67.2	70.5	74.8	71.5	*62.5	56.2	45.9
9	45.8	47.1	53.7	58.8	61.4	67.5	71.0	75.4	70.8	63.0	55.0	46.1
10	45.9	†48.4	53.0	57.6	62.0	66.1	72.8	74.8	70.9	61.8	53.3	46.1
11	43.9	46.8	53.3	57.3	61.4	†65.7	74.4	74.3	69.9	61.1	52.1	46.4
12	42.7	46.2	53.4	56.6	59.4	68.2	75.4	72.5	70.4	58.7	51.7	45.3
13	43.6	48.1	53.2	56.2	59.9	68.5	74.0	72.0	70.8	57.0	52.0	44.7
14	45.7	47.9	54.1	56.8	59.2	68.3	74.1	72.8	70.4	56.6	53.0	45.7
15	44.6	47.3	54.0	46.5	60.4	67.8	71.5	73.3	70.3	58.6	52.3	47.8
16	45.9	48.8	54.8	55.4	60.4	68.4	73.0	*72.1	68.3	58.9	52.5	47.3
17	46.0	48.9	53.5	54.7	61.5	69.3	72.5	71.5	68.0	60.9	50.5	47.3
18	†45.5	49.7	53.4	56.4	64.0	69.2	70.6	72.9	67.6	61.4	50.1	49.2
19	45.4	50.1	54.0	54.4	65.8	68.6	71.0	71.7	67.5	62.2	50.2	48.6
20	45.7	50.3	55.5	55.4	64.7	68.8	72.5	69.5	68.3	61.3	50.5	47.2
21	45.8	51.2	56.2	57.5	64.0	68.4	73.2	69.2	69.6	61.4	51.0	48.7
22	†47.4	51.9	57.0	58.2	63.8	67.2	73.6	69.5	69.5	60.9	50.7	48.7
23	47.4	53.1	56.5	58.3	64.8	69.2	74.5	69.4	67.3	60.5	50.9	48.0
24	48.0	53.4	56.4	60.1	66.3	68.8	73.3	69.3	66.4	61.0	50.4	49.3
25	47.4	54.9	57.0	58.5	66.9	70.5	71.8	69.7	66.4	61.3	48.5	48.2
26	45.8	54.8	56.4	58.1	67.0	71.5	71.3	69.6	66.7	59.7	48.3	47.2
27	46.3	55.0	†58.4	61.0	67.8	70.5	72.7	69.9	67.1	60.0	48.7	46.7
28	47.1	54.7	56.5	62.7	68.5	68.8	72.3	69.5	66.3	59.7	48.9	46.1
29	48.0	-----	57.6	62.7	69.0	69.6	71.7	70.1	65.1	59.6	50.1	44.1
30	48.2	-----	57.2	52.6	68.9	71.5	72.5	71.7	63.1	58.1	50.4	43.5
31	49.4	-----	57.1	-----	69.0	-----	72.4	72.7	-----	55.9	-----	42.6
Monthly	46.1	49.9	55.1	58.0	63.6	68.7	72.3	72.0	69.2	60.8	52.4	47.4

* Means for eight years.

† Means for seven years.

DAILY NORMAL PRECIPITATION AT SACRAMENTO.

The following table gives the normal precipitation for each day of each month, at Sacramento, as deduced from thirty-eight years' observations:

DATE.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.12	.10	.09	.06	.02	.01	.01	T.	T.	.02	.07	.14
2	.12	.10	.09	.07	.02	T.	T.	T.	T.	.02	.07	.14
3	.12	.11	.09	.06	.02	.01	T.	T.	.01	.02	.07	.14
4	.12	.10	.09	.07	.02	T.	T.	T.	T.	.02	.07	.14
5	.13	.10	.09	.06	.03	.01	T.	T.	T.	.02	.07	.14
6	.12	.11	.09	.07	.02	T.	T.	T.	.01	.02	.07	.14
7	.12	.10	.09	.06	.02	.01	T.	T.	T.	.03	.06	.14
8	.12	.10	.09	.07	.02	T.	T.	T.	.01	.02	.07	.14
9	.12	.11	.09	.06	.02	.01	T.	T.	T.	.02	.07	.14
10	.12	.10	.09	.07	.03	T.	T.	T.	.01	.02	.07	.14
11	.13	.10	.09	.06	.02	.01	T.	T.	T.	.02	.07	.14
12	.12	.11	.09	.07	.02	T.	T.	T.	.01	.02	.07	.14
13	.12	.10	.09	.06	.02	.01	T.	T.	T.	.02	.07	.14
14	.12	.10	.09	.07	.02	T.	T.	T.	T.	.02	.06	.14
15	.12	.11	.10	.06	.03	.01	.01	T.	.01	.03	.07	.13
16	.12	.10	.09	.07	.02	T.	T.	T.	T.	.02	.07	.14
17	.13	.10	.09	.06	.02	.01	T.	T.	T.	.02	.07	.13
18	.12	.11	.09	.07	.02	T.	T.	T.	.01	.02	.07	.14
19	.12	.10	.09	.06	.02	.01	T.	T.	T.	.02	.07	.14
20	.12	.10	.09	.07	.03	T.	T.	T.	.01	.02	.07	.14
21	.12	.11	.09	.06	.02	.01	T.	T.	T.	.02	.06	.14
22	.12	.10	.09	.07	.02	T.	T.	T.	.01	.02	.07	.14
23	.13	.10	.09	.06	.02	.01	T.	T.	T.	.03	.07	.14
24	.12	.11	.09	.07	.02	T.	T.	T.	T.	.02	.07	.14
25	.12	.10	.09	.06	.03	T.	T.	T.	.01	.02	.07	.14
26	.12	.10	.09	.07	.02	T.	T.	T.	T.	.02	.07	.14
27	.12	.11	.09	.06	.02	T.	T.	T.	T.	.02	.07	.14
28	.12	.10	.09	.07	.02	T.	T.	T.	.01	.02	.06	.14
29	.12	-----	.09	.06	.02	T.	T.	T.	T.	.02	.07	.14
30	.13	-----	.10	.07	.03	T.	.01	T.	T.	.03	.07	.13
31	.12	-----	.09	-----	.02	-----	T.	T.	-----	.02	-----	.14
Monthly normals....	3.77	2.89	2.81	1.95	.68	.12	.03	T.	.11	.66	2.06	4.32

Yearly normal precipitation, 19.40 inches.

NOTE.—T. means a trace of precipitation.

Date of First and Last Light and Killing Frosts, and Date of Blooming Fruit Trees, in Sacramento.—The following table of first and last light frosts, first and last killing frosts, along with the lowest temperature, and also the dates at which fruit trees were first noticed beginning to bloom, and the dates and amounts of snowfall for nineteen years, are from the records of Mr. Samuel H. Gerrish, a local and voluntary meteorological observer of the Signal Service, who furnished this data for publication:

YEAR.	First Light Frost of the Season.	Minimum Temperature—First Light Frost.	First Killing Frost of the Season.	Minimum Temperature—First Killing Frost.	Last Light Frost of the Season.	Minimum Temperature—Last Light Frost.	Last Killing Frost of the Season.	Minimum Temperature—Last Killing Frost.	First Appearance of Blooming Fruit Trees.
1869-70	November 8, 1869.	40	November 30, 1869	31	May 17, 1870.	31	March 8, 1870.	31	February 21, 1870
1870-71	October 24, 1870	36	October 27, 1870	30	April 19, 1871	40	March 18, 1871	31	March 8, 1871
1871-72	October 25, 1871	37	November 6, 1871	30	April 12, 1872	38	January 9, 1872	27	February 26, 1872
1872-73	October 22, 1872	37	November 10, 1872	27	April 6, 1873	34	April 5, 1873	27	February 16, 1873
1873-74	October 16, 1873	33	October 17, 1873	31	April 14, 1874	38	March 19, 1874	28	February 14, 1874
1874-75	October 20, 1874	39	November 20, 1874	29	April 7, 1875	31	April 6, 1875; cold- est ever known.	24	February 21, 1875
1875-76	October 28, 1875	38	No killing frost; coldest on December 21, 1875.	35	April 8, 1876	38	January 16, 1876	29	February 20, 1876
1876-77	November 3, 1876	36	November 13, 1876	29	April 23, 1877	42	February 11, 1877	32	February 2, 1877
1877-78	October 31, 1877	33	November 1, 1877	31	March 9, 1878	39	January 12, 1878	30	February 1, 1878
1878-79	October 16, 1878	37	October 28, 1878	29	April 15, 1879	41	February 6, 1879	27	February 15, 1879
1879-80	October 8, 1879	39	November 27, 1879	25	April 18, 1880	37	March 30, 1880	28	February 29, 1880
1880-81	October 31, 1880	35	November 23, 1880	28	March 18, 1881	33	March 17, 1881	31	February 22, 1881
1881-82	October 4, 1881	36	November 11, 1881	30	May 15, 1882	41	March 9, 1882	29	February 28, 1882
1882-83	October 5, 1882	42	November 13, 1882	27	May 2, 1883	41	February 18, 1883	29	February 19, 1883
1883-84	October 16, 1883	39	November 4, 1883	31	April 17, 1884	43	February 18, 1884	31	February 20, 1884
1884-85	September 30, 1884	41	November 30, 1884	31	April 22, 1885	41	January 26, 1885	31	February 10, 1885
1885-86	October 11, 1885	38	No killing frost; coldest on December 28, 1885.	34	April 14, 1886	39	January 10, 1886	27	February 8, 1886
1886-87	October 9, 1886	40	November 4, 1886	32	May 10, 1887	34	February 26, 1887	26	January 28, 1887
1887-88	October 20, 1887	37	November 25, 1887	28	April 26, 1888	38	February 3, 1888	28	January 20, 1888
1888-89	October 19, 1888	37	November 6, 1888	28	March 19, 1889	40	February 19, 1889	26	February 3, 1889

Dates of Snowfall in Sacramento and the Amount Precipitated.—January 29, 1862, .75 of an inch. January 12, 1868, 1.62 inches. December 3, 1873—6.00 inches. April 5, 1875, a trace; enough to whiten the ground before it melted. This was the coldest April ever known. A very light trace on January 13, 1879. January 26, 1880, estimated about .25 of an inch; it mostly melted as it fell. February 17 and 18, 1882, light trace. December 31, 1882, estimated about 4.00 inches; measured 1.50 inches actual measurement. February 1 and 6, 1883, a very light fall of snow. January 4, 1888, 2.89 inches. January 5, 1888, 3.00 inches. The snow that fell on the fifth was very damp and packed hard; if it had been as light as that on the fourth, I think we would have had over 6.00 inches. January 16, 1888, a trace.

Highest Temperature at Florin, Sacramento County.—The following record of the highest temperature for each month of the year, and for each year from 1879 to 1888, inclusive, was furnished by Mrs. W. H. Robinson, of Florin, Sacramento County, California:

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	Septem-ber.	October.	Novem-ber.	Decem-ber.	Highest During the Year.
1879	63	79	78	87	93	102	103	105	98	90	76	66	105 in August.
1880	66	68	77	83	94	96	103	100	98	90	82	66	103 in July.
1881	70	72	88	90	96	99	103	98	100	82	78	60	103 in July.
1882	65	67	82	89	98	98	102	102	104	80	74	69	104 in September.
1883	66	75	81	78	98	107	108	103	104	86	71	65	108 in July.
1884	64	74	77	85	94	95	101	101	97	87	89	60	108 in July.
1885	69	72	82	86	102	102	101	109	103	102	76	66	101 in July and Aug.
1886	67	74	76	86	96	102	110	107	101	88	72	70	109 in August.
1887	65	68	83	88	110	111	105	104	105	97	77	66	110 in July.
1888	65	79	79	92	93	99	106	110	110	92	80	65	111 in June.
Highest for each month	70 in 1881.	79 in 1879, '88.	88 in 1881.	92 in 1888.	110 in 1887.	111 in 1887.	110 in 1886.	110 in 1888.	110 in 1888.	102 in 1885.	89 in 1884.	70 in 1886.	111 in 1887.

Lowest Temperature at Florin, Sacramento County.—The following record of the lowest temperature for each month of the year, and for each year, from 1879 to 1888, inclusive, was furnished by Mrs. W. H. Robinson, of Florin, Sacramento County, California:

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	Septem-ber.	October.	Novem-ber.	Decem-ber.	Lowest During the Year.
1879	31	32	32	44	42	46	52	56	54	40	34	26	26 in December.
1880	30	30	30	42	40	51	53	54	50	42	27	40	27 in November.
1881	34	40	34	45	44	46	50	49	46	32	28	30	28 in November.
1882	24	25	27	36	30	45	50	53	47	33	29	24	24 in Jan. and Dec.
1883	19	22	39	37	40	48	54	50	50	37	23	22	19 in January.
1884	27	21	34	40	41	53	53	52	45	38	31	20	20 in December.
1885	31	32	40	32	46	42	54	52	47	40	36	35	31 in January.
1886	28	39	36	36	40	50	52	54	47	37	29	29	28 in January.
1887	28	27	31	41	41	44	51	51	46	42	23	21	21 in December.
1888	19	30	38	40	41	50	53	54	55	43	36	36	19 in January.
Lowest for each month	19 in 1883, '88.	21 in 1884.	27 in 1882.	32 in 1885.	30 in 1882.	42 in 1885.	50 in 1881, '82.	49 in 1881.	45 in 1884.	32 in 1881.	23 in 1883, '87.	20 in 1884.	

Rainfall at Folsom, Sacramento County.—The rainfall data tabulated below is from Folsom, Sacramento County, and was furnished by J. H. Sturges, special River Observer of the United States Signal Service at that point. The rainfall is from September, 1871, to date:

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for Year.	Season of.	Total for Season.
1871									spring.	.55	1.35	13.12		1871-72	28.82
1872	5.50	4.72	1.60	.63	.75	spring.	none	spring.	spring.	.25	2.80	6.53	22.78	1872-73	15.63
1873	1.64	4.05	.34	.05	.03	none	.01	spring.	spring.	spring.	1.39	10.51	18.02	1873-74	24.46
1874	5.26	2.63	1.82	2.63	.81	spring.	none	none	spring.	1.66	5.19	.13	19.53	1874-75	15.70
1875	6.14	.04	1.24	spring.	.07	1.23	none	none	none	.26	7.12	4.49	20.59	1875-76	30.24
1876	5.89	4.06	6.62	1.56	.24	spring.	.26	.03	none	3.76	.25	none	22.67	1876-77	10.19
1877	3.38	.68	.81	spring.	1.02	spring.	spring.	spring.	none	.75	.54	1.34	8.52	1877-78	25.00
1878	8.41	8.37	4.23	1.10	.26	none	none	spring.	.12	.43	.62	.56	24.10	1878-79	21.91
1879	4.87	4.94	5.43	3.38	1.44	.12	none	spring.	none	1.21	2.20	3.19	26.78	1879-80	25.09
1880	1.51	2.13	1.40	11.39	2.06	none	spring.	none	none	spring.	.10	9.85	28.44	1880-81	25.91
1881	6.70	6.07	1.38	1.13	spring.	.68	none	none	.40	1.21	1.57	3.45	22.59	1881-82	18.68
1882	2.38	3.01	3.82	2.51	.27	.06	spring.	none	.68	2.81	3.95	.74	26.23	1882-83	22.22
1883	2.11	.80	5.46	1.10	4.57	none	none	none	1.82	1.41	.81	.92	19.00	1883-84	31.02
1884	3.88	5.92	8.14	5.32	1.16	1.64	none	spring.	.64	2.02	none	6.13	37.85	1884-85	16.58
1885	1.91	.84	15	1.68	spring.	.21	.02	spring.	.21	spring.	10.91	4.88	20.81	1885-86	34.75
1886	7.60	.90	3.16	6.78	.29	none	none	none	none	1.34	.55	3.35	23.97	1886-87	20.11
1887	1.27	.63	1.30	2.84	.63	.22	none	spring.	.38	none	.59	4.82	20.66	1887-88	16.28
1888	5.83	.84	3.08	.12	.35	.27	.02	.01	.57	none	3.71	4.32	19.12	1888-89	*17.31
1889	.32	.68	7.97	.61											
Totals	74.60	59.89	57.05	42.23	13.35	4.43	.31	.04	4.44	17.66	44.25	81.33	375.66		382.65
Averages	4.144	3.327	3.169	2.346	.785	.261	.018	.002	.247	.981	2.458	4.518	22.068		22.508

* Up to May 1, 1889.

THE COLD WAVE OF JANUARY, 1888.

The following notes on the cold wave of January, 1888, show that no such a polar current has visited this coast since 1854, which appears from the meager records obtainable, to have been, if anything, somewhat colder than the cold wave of January, 1888. The minimum generally in the Sacramento Valley was about 18°; and in the San Joaquin Valley, 12° to 18°. In the foothills, from 13° to 18°. South of Tehachapi, it ranged from 10° to 30°. It was also the coldest in Portland, Oregon, ever known; the thermometer fell to 2° below zero, Signal Service records. The lowest before this was 3° above zero, in January, 1875.

[From the "Daily Evening Bee," January 14, 1888.]

A LITTLE COLD WEATHER, BUT NONE THAT WILL DO ANY PARTICULAR DAMAGE.—DR. LOGAN'S RECORDED MINIMUM TEMPERATURE AGAIN REACHED.—SOUTHERN CALIFORNIA HAS NONE THE BEST OF NORTHERN.

On Thursday the sun came out bright and warm, and the streets were thronged with pedestrians clad in summer attire. The peddlers were abroad merrily calling out: "Oranges, sweet oranges, 15 cents a dozen," and every one believed that the cold weather was over. Last evening, however, the "cold wave" returned, carried by a north wind fresh from the snow-clad Sierras. The wind was quite a vigorous one, and shutters and signs swung and banged during the night. The mercury took a dive toward the bottom of the thermometer, and the result was that when morning came there was a wintry aspect quite unusual in the northern citrus belt.

The sun came out clear and warm, however, and the frigidity of the atmosphere was soon modified, though pedestrians all during the day showed a preference for the sunny side of the street.

In the early morning there was ice on small ponds in the gutters and streets, and small boys gathered about the "smooth article" and gazed in wonder at the natural curiosity.

Coming at this season of the year, the cold snap has done no damage. In fact, judged from a hygienic standpoint, the desiccating north wind is a blessing, serving, as it does, to dry up and obliterate the germs which produce disease.

WHAT THE SIGNAL SERVICE OBSERVER SAYS.—HE GIVES SOME VALUABLE AND INTERESTING READING.

It has been said by some doubting Californians that Dr. Logan's minimum or lowest temperature of 19° during the cold winter of 1853-54 was not correct; that they did not believe that such a low temperature was recorded on that occasion. Let those persons hold their peace, for after a lapse of thirty-four years a second occurrence of such a low minimum temperature has made its appearance.

THE EARLY MORNING.

The Signal Service minimum thermometer at 4 o'clock this morning was 24°, and between that time and sunrise it had fallen to 19°, or exactly the same minimum temperature that Dr. Logan recorded in January, 1854.

It is to be hoped that the doctor's record will no longer be disputed, for the above shows that he was a painstaking and careful observer during the early days, when nothing was thought of but gold, gold, gold; but the doctor found it cold, cold, cold, for that particular year.

EVERY THIRTY YEARS.

Dr. Bennett, of England, says that about once in thirty years there is an extraordinary cold wave blows down the Alps Mountains to the north of the great citrus belt and winter resorts of Northern Italy. These exceptionally cold waves come rushing down the cañons and kill all orange and lemon trees that are not planted in protected places.

COLD WAVES IN FLORIDA.

Florida has such cold waves at certain intervals. It will be remembered when the last one visited that State; the average newspaper man of California came out in learned and labored articles to prove that such cold weather blasts could not possibly occur in California, although Dr. Logan's record was before them.

THE THREE CITRUS DISTRICTS.

To-day's minimum temperature shows that the three great citrus districts of the northern hemisphere are alike liable, at long intervals, to be visited by an exceptionally cold wave; therefore, let us be charitable toward other countries that boast of citrus belts.

THE BEST IN THE WORLD.

We all know that this, our glorious State, is the most free, finest, and best in the known world. The Signal Service reports at 4 o'clock A. M. show an extremely high barometer, accompanied by a cold wave in Washington Territory, Oregon, and California; in California, a gale from the north has been blowing all night, which is, in a measure, the cause of this extreme and very unusual low temperature at Sacramento, because it came directly off the snow and ice of the mountains, and moving so rapidly that it has no time to be warmed by slowly passing over the warmer region of the Sacramento and San Joaquin Valleys, but reaches us with almost the same breath that it left the mountains.

ICE IN THE RIVER.

Captain Foster, of the Steamboat Company, says this is the first time since 1854 that he has noticed ice floating down the Sacramento River. It has been floating down this morning, measuring about one sixteenth of an inch in thickness, and no doubt, these thin spiculæ of ice formed along the shores of the American and Sacramento Rivers above this city, and by the force of the high northerly winds were broken loose from the shores, grinding them together and blowing them into the current of the two streams mentioned above.

HIGHEST AND LOWEST TEMPERATURE.

The temperature at 4 A. M. was 24°; between that time and sunrise it fell to 19°; at 8:10 A. M. it was 21°; at 9:20 A. M. 23.5°; at 10:25 A. M. 26°;

at 11:30 A. M. 29.5°; 12, noon, 30°. The temperature, therefore, does not stand as high as the freezing point, which is 32°. Ice on the roof, in a tub thoroughly exposed to the full force and effect of the weather, was one and one tenth inches in thickness at 9:20 A. M., and at noon was the same. In fact, the hole that was cut to measure the ice was closed by a thin film of congelation.

ALONG THE RAILROAD LINES—WHAT THE THERMOMETER SHOWED AT SEVEN THIS MORNING.

At 7 o'clock this morning the temperature was as follows at the railway stations indicated: Truckee, 25° below zero; Summit, 12° below zero; Cisco, 3° above zero, and six inches of snow; Emigrant Gap, 8°; Blue Cañon, 7°; Towles, 8°; Gold Run, 7°; Colfax, 16°; Auburn, 26°; Newcastle, 20°; Rocklin, 20°; Sacramento, 22°; Tehama, 34°; Nord, 17°; Chico, 20°; Biggs, 25°; Marysville, 20°; Lincoln, 20°; South Vallejo, 22°; Napa, 26°; Calistoga, 24°; Suisun, 26°; Elmira, 25°; Davisville, 24°; Woodland, 20°; Knights Landing, 28°; Dunnigan, 29°; Williams, 23°; Willows, 28°; Orland, 22°; Corning, 26°; Red Bluff, 30°; Wheatland, 24°.

[“Daily Record-Union,” January 16, 1888.]

COLD WAVE ONCE IN FORTY YEARS.—THE COLD WAVE OF JANUARY, 1854, ALMOST EQUALED BY THE PRESENT COLD SPELL.

For the second time in thirty-four years an extraordinary cold wave is sweeping down upon the Pacific Coast. The Signal Service reports show the minimum or lowest temperature on Saturday and yesterday (Sunday) to have been 19°. It has not been so low as that before since January, 1854, when the same temperature was recorded by the late Dr. Thomas M. Logan, the then meteorologist of this city. For the sake of comparison, I visited the city's free library to find a copy of the old “Sacramento Union” for January, 1854, but there were no copies so early as that date, in the library, of that particular paper. There was a copy of the Sacramento “Daily Democratic State Journal.” From the columns of its local news I find considerable very interesting reading, just at present, for the citizens of our city. If the dates were left out, the articles would very well refer to the present almost unprecedented cold weather. The articles copied from the above named paper are as follows:

Saturday, January 7, 1854.—Yesterday was a clear, calm, cold day. We were shown ice yesterday morning, one and one quarter of an inch thick, the thickest ever seen, we believe, in Sacramento. The night of Thursday (5th) was unusually cold.

The following would do for a good description of the last three days of our present cold spell:

Monday, January 9, 1854.—The weather has been unusually cold the past three days. Yesterday, in riding a short distance in the country, we noticed, as late in the day as 3 o'clock, ice in considerable quantities in the marshes by the roadside. Such an occurrence was never noted before.

To show that the cold wave of 1854 did not stop at Sacramento, the following article from the “Democrat” will prove:

Wednesday, January 11, 1854.—The Stockton “Journal” has been shown a piece of ice three inches thick, that was formed on Thursday (5th) night last.

The following certainly is applicable to our present cold spell; in fact, change the date to January 16, 1888, and the same words will apply to Sacramento now:

Friday, January 20, 1854.—This season is one of most extraordinary severity. From all we can learn never has its equal been known, even to that antiquated individual the oldest inhabitant. The ground yesterday morning (19th) was frozen at least two inches in depth, and ice was formed from one half to one and one half inches in thickness. Even the sun scarcely melted the ice, and the moment it ceased to shine upon any one spot freezing commenced. The air was clear, and the mountains loomed up covered to an immense height with snow. Indeed everything looked and felt like winter. We hope such unpleasant weather will not continue long.

Boys were skating yesterday (January 15, 1888), back of the roundhouse. Read the following, dated Saturday, January 21, 1854:

SKATING IN SACRAMENTO.—The frost of night before last was by far the heaviest we have seen in this valley; the unplanked levee became as firm as the planked streets. Crystal formations were everywhere that damp had of late been, and to cap the climax, we beheld, when we arose yesterday morning, numerous little boys disporting themselves on a pond in Second Street, by cutting their names with their skates on the ice. How the ice got there we could account for, and where the boys came from we could imagine, but when we thought of the skates we came to a full stop. Whose speculative spirit thought of bringing skates to Sacramento?

Monday, January 23, 1854.—After a succession of most extraordinary cold days the weather moderated yesterday afternoon.

From the same paper and the same date I clip the following:

FROZEN OVER.—Sutter Lake was frozen over Saturday night and remained so all day yesterday; the ice was from one half to one inch thick. This never happened before—at least to the knowledge of any person now living in this region.

Tuesday, January 24, 1854.—The Stockton Slough was frozen over on Saturday night (21st) so that the steamer Clay had to beat her way through the ice. The like was never before known in that vicinity.

Wednesday, January 25, 1854.—The suspension of heavy and hard frost for the past two weeks have enabled our waterworks contractor to proceed with the reservoir.

Wednesday, January 25, 1854.—The recent cold weather caused quite a rise in the price of ducks, geese, etc., owing to ponds being frozen over so as to prevent them getting their accustomed food.

The following notes must mean Nevada County and not the State of Nevada, for much colder weather than that is experienced in the Sagebrush State:

Wednesday, January 25, 1854.—The people of Nevada may well complain of the cold, as the following from "Young America" will show: On Friday last the thermometer stood at 2:30 o'clock A. M., 4° below zero; 5 o'clock A. M., 8.5° below zero; 9:30 o'clock A. M., 7° below zero. This, we believe, is the coldest weather yet recorded in California. Ice formed four inches thick.

The above numerous though brief notes from the "Daily Democratic State Journal," show that the cold spell of January, 1854, lasted upwards of two weeks. Although the paper did not give any temperature figures, we find, by referring to the record of Dr. Logan for that month, that he records a minimum temperature of 19°, which is our minimum for Saturday and yesterday. It can be safely said that we are liable to an extremely cold wave along the entire Pacific Coast of the United States, every thirty or forty years.

The average temperature on Saturday and yesterday, was 28°; Saturday being 18° colder than the normal for that day, and yesterday 17° colder than the normal. The highest and lowest temperature was, for Saturday, 38° and 19°, and yesterday, 37° and 19°, with high northerly winds on Saturday, and brisk to gentle northerly winds yesterday.

An abstract from Dr. Logan's meteorological table for the month of January, 1854 (taken from the "Daily Union" of January thirtieth), shows

that during the week from the seventh to the fourteenth, the maximum temperature was 54°, the minimum 32°, and there were no rainy days during the week. From the fourteenth to the twenty-first there were three rainy days. The highest temperature was 69°, and the lowest 32°; the prevailing winds being from the south and southeast. The following week the wind ranged from the southeast to northwest, and there were two rainy days. The highest temperature was 49°, and the lowest 19°, on the morning of the twenty-first. During the last week the thermometer ranged from 56° to 28°, with two rainy days, and the prevailing winds were from the north and northwest. In his remarks Dr. Logan says:

The thermometer used for these observations is hung in still air of a northern exposure and protected from the influence of wind or sun. The observations are made at 8 A. M., 3 P. M., and 10 P. M. The minimum, therefore, which generally occurs during the night, has not been obtained. The degree of cold experienced during the month is unprecedented. Sutter Lake was frozen over on the sixth and on the twenty-first, and remained so all the day of the twenty-second. Ice formed in the city from the thickness of one to two and a half inches. The effect of such weather upon the health manifested itself in the extinguishment of intermittent fevers, which had been previously so prevalent, and an increase of catarrhal and other inflammatory affections of the respiratory organs.

ICE ON THE SLOUGHS.

Ice formed on Lake Como, alias China Slough, during the recent cold spell, to the depth of nearly an inch near the shore, and the whole surface of the slough was frozen over except a space of about eighty feet square near the eastern end. The mud-hens and ducks were forced into this small space, and consequently appeared more than usually numerous. The slough was never so nearly frozen over before; but in 1854, so says a prominent citizen and capitalist, the ice was much thicker near the southern shore, and afforded good skating for many people. The ice twenty feet from shore at that time was too thin to support a person, and thus the skaters were confined to a space about fifteen feet wide and nearly three hundred yards long. Last week ice about half an inch thick formed on the surface of the slough back of the roundhouse, and the north wind of Friday and Saturday blew water over it. The water froze almost immediately, and in a short time ice sufficiently thick to bear the weight of a heavy man was formed. Several parties who were so fortunate as to possess ice skates improved the occasion, and had a high old skating carnival. A short distance from the shore the ice was quite thin, but fortunately no one ventured far enough from land as to endanger their lives thereby, or to furnish the newspaper scribes with an interesting item.

Saturday morning thin pieces of ice which the stiff norther had broken off from the banks where the water was shallow, floated down the river, and was considered a great curiosity by the people. It was one sixteenth of an inch thick.

[“Daily Evening Bee,” January 18, 1888.]

FACTS ABOUT THE WEATHER.—A FORMER RESIDENT RELATES HIS EXPERIENCES IN SACRAMENTO.

Sergeant Barwick:

DEAR SIR: I noticed your report of weather statistics in Saturday's “Daily Bee,” particularly the extracts from Dr. Logan's report of the weather for the winter of 1853 and 1854. Many times I have referred to that winter in conversation with others, as the coldest I have ever experienced since my arrival in California, July 4, 1849, and a resident of Sacramento from the fourteenth of the same month and year until April, 1861, and in other places until the commencement of the present cold wave.

During the cold spell mentioned above, I was doing business at the Big Tree Store, corner of Eighth and J Streets, Sacramento. I have no recollection of the day or date of the commencement of the cold wave in 1854. I kept no record. There had been a fall of snow, leaving about two and a half inches on the ground, and the weather cleared up that night very cold. I usually opened the store in the morning before daylight. Having occasion for some water to wash myself, I went in the rear to the pump and caught hold of the iron handle. My hand clung to it; experience told me it required very cold weather to freeze a moist hand to cold iron. Having a thermometer hanging on the outside of the house facing the east, an examination of the same was made with a lighted candle. The reading was 18° above zero, or 14° below the freezing point. This would make it 1° below Dr. Logan's reading. It was all of two weeks before the snow disappeared from sheltered places.

It is now thirty-four years since that cold wave passed over this State, and I have not seen any winter to compare with it until the present one of 1888.

Another circumstance I will relate, during the cold weather of 1854. I have no doubt many old settlers are yet lingering in Sacramento who will remember the cake of ice I placed on my platform scales, in front of my store on J Street. My well water was hard, and would not readily remove dirt when using it. To obtain soft water I had a large hogshead placed in the rear of the store to catch rain water from the roof. It was facing the north, and so sheltered the sun never shown upon it. The first morning after the cold wave set in, I noticed the water frozen in the hogshead. I requested all of our folks in the store not to break the ice until the cold spell had passed over; every night the freeze added thickness to that ice, and continued nearly two weeks before the temperature moderated above the freezing point. Even the snow in the sheltered places lay on the ground during that time. With a crowbar I broke the ice in that hogshead, taking from it a large block and placing it on my platform scales in front of the store on J Street, and measured the thickness. The sides next to the hogshead were eight and a half (8½) inches thick, and the center six (6) inches. The winter of 1854 was the longest cold spell I have any recollection of, until the present winter. The highest and lowest temperature at Oroville during the present time, up to and including yesterday, the sixteenth, was 56° and 20°.

Yours truly,

HIRAM ARENTS,

Voluntary Signal Service Observer.

OROVILLE, January 17, 1888.

THE COLD WAVE.—RECORDS OF THREE SACRAMENTO OBSERVERS AT DIFFERENT POINTS IN THE CITY.

The following interesting tabulated matter during January last shows the lowest temperature recorded by self-registering instruments in different parts of the city. Captain Foster, of the steamboat company, has his thermometer at his residence, southwest corner of Eleventh and F Streets. It is a Green's standard signal service self-registering instrument, and is exposed under a grapevine arbor about five feet from the ground, in his back yard, the two-story house breaking (somewhat) the force of the north winds.

S. H. Gerrish's is a Sixe self-registering thermometer, manufactured by Hicks, of London, England, and is situated in his back yard, at No. 1517

G Street, being on the north side of the street. The thermometer is exposed to the full effect of radiation to the sky, there being no covering over it, and is in the back yard subject to the full force and effects of the north winds, which are cold in winter and hot in spring, summer, and fall. Mr. Gerrish's thermometer is about five or six feet above the ground.

The Signal Service thermometer is a Green's standard minimum, self-registering instrument, exposed on the roof of the Signal Office building, at No. 117 J Street, sixty-one feet above the ground, and is in a single latticed shelter, Signal Service pattern. The wind blows through the shelter in all directions.

The table below shows that during the thirty-one days of January there were but two upon which each observer recorded the same minimum temperature, and singularly, too, the minimum temperature was the same on both the days, being 34° on both the twelfth and nineteenth. The wind was north, blowing nine miles per hour, and weather cloudy at 4 A. M. of the twelfth, and southwest four miles per hour and weather cloudy on the nineteenth.

Captain Foster's record and the Signal Service record were the same on eight days, as follows: Twelfth, 34° ; thirteenth, 32° ; seventeenth, 22° ; nineteenth, 34° ; twentieth, 38° ; twenty-first, 41° ; twenty-third, 49° ; twenty-fourth, 42° . There were but three days upon which the records of Mr. Gerrish and the Signal Office coincided, those being the twelfth, 34° ; nineteenth, 34° ; and twenty-second, 45° .

The average difference during the month was as follows: Captain Foster 1.8° lower than the Signal Service, 1.1° higher than Mr. Gerrish, while the records of the latter gentleman show an average difference of 2.9° less than the Signal Service, and 1.1° less than Captain Foster.

There were sixteen days in January that were cloudy at 4 A. M. The average minimum temperature for those sixteen cloudy days at the above hour, was: Foster, 39.9° ; Gerrish, 39.8° ; Signal Service, 41.6° —making the latter only 1.7° higher than Foster, and 1.8° higher than Gerrish. The fifteen days that were clear or fair at 4 A. M., show an average minimum of 26.9° for Foster, 25.3° for Gerrish, and 29.5° for the Signal Service, making the latter 2.6° higher than Foster, and 4.2° higher than Gerrish. The greatest difference (6°) between the readings of Mr. Gerrish's thermometer and that of the Signal Service, occurred on the seventh, eighth, ninth, and sixteenth. At each time the wind was from the north, and gentle in velocity, and calm on the eighth. The weather was clear each day.

The least difference was 1° —on the first, fourteenth, twentieth, twenty-first, twenty-fourth, and twenty-sixth. The weather was rainy or cloudy on each day, except on the fourteenth, when it was blowing briskly from the north. There does not appear to be so much difference between the readings of the Signal Office and Captain Foster's as there is between the Signal Office and Mr. Gerrish's records. It appears from the above comparisons for January that, as a general thing, there is a difference of from 1° to 6° in clear weather between thermometers five feet above the ground, and those located sixty-one feet above. The difference is greater in calm weather, or during light to gentle winds, and when the temperature is below the freezing point. The least difference in clear weather usually occurs when it is quite windy—that is, when the wind is fresh to brisk and high. In cloudy weather there is less difference than in clear weather, because the clouds reflect the heat back to the earth, and prevent the rapid radiation from all substances growing on the earth's surface, and prevents the heat from escaping so rapidly from the earth's surface by radiation.

This table of comparisons will give a good idea of the various currents of air throughout the city. The Signal Office being near the river (within one block), its minimum should be a little higher, while Captain Foster's is about fifteen blocks, or over a mile, northeast of the Signal Office, and on the corner of a wide street, while Mr. Gerrish's place of residence and observation are very nearly one mile northeast of the Signal Office, and are situated in the middle of the block.

COMPARISON OF RECORDS.

JANUARY.	Minimum Temperature by Captain Foster's Thermometer	Minimum Temperature by S. H. Gerrish's Thermometer	Minimum Temperature by Signal Service	Wind Direction, Signal Service, 4 A. M.	Wind Velocity, Signal Service, 4 A. M.	State of the Weather, Signal Service, 4 A. M.
1	39	39	40	S.E.	5	Light rain.
2	39	39	42	S.	1	Light rain.
3	40	40	44	S.W.	12	Light rain.
4	28	26	31	W.	5	Clear.
5	32	31	34	Calm.	0	Cloudy.
6	28	27	29	N.	4	Cloudy.
7	22	20	26	N.	6	Clear.
8	20	18	24	Calm.	0	Clear.
9	21	19	25	N.	4	Clear.
10	24	22	27	Calm.	0	Clear.
11	25	24	28	N.W.	2	Clear.
12	34	34	34	N.	9	Cloudy.
13	32	29	32	S.E.	7	Clear.
14	20	18	19	N.	27	Clear.
15	18	16	19	N.	9	Clear.
16	19	18	24	N.	6	Clear.
17	22	20	22	N.	8	Clear.
18	22	22	25	E.	4	Clear.
19	34	34	34	S.W.	4	Cloudy.
20	38	37	38	S.E.	3	Light rain.
21	41	40	41	S.E.	2	Cloudy.
22	46	45	45	Calm.	0	Light rain.
23	49	47	49	S.	6	Foggy.
24	42	41	42	S.W.	3	Cloudy.
25	46	45	48	Calm.	0	Cloudy.
26	40	40	41	N.W.	4	Fair.
27	46	45	48	S.W.	2	Cloudy.
28	44	43	46	S.E.	3	Cloudy.
29	50	49	51	S.E.	6	Cloudy.
30	48	46	52	S.E.	5	Fair.
31	42	41	48	S.E.	3	Fair.
Average	33.9	32.8	35.7	N. & S.E.	4.8	

Rainfall at Woodland, Yolo County.—Below we append a table of the monthly rainfall at Woodland, since 1873, taken from J. B. Elston's record, which is the standard gauge for Yolo County:

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	Septem-ber.	October.	Novem-ber.	Decem-ber.	Total for Year.	Season of.	Total for Season.
1873	1.25	2.84	.56	.18	none	none	none	none	none	.20	1.15	10.44	16.62	1872-73	10.22
1874	5.99	1.33	2.85	.64	.40	none	none	none	none	3.26	2.79	.16	17.42	1873-74	23.00
1875	5.22	.35	.66	none	.15	1.59	none	none	none	.44	3.87	2.49	14.77	1874-75	14.18
1876	4.40	4.85	4.24	1.40	.45	none	.16	none	.17	3.37	.27	none	19.31	1875-76	22.30
1877	3.95	1.42	.77	.03	.53	none	none	none	none	.94	1.10	1.29	10.03	1876-77	10.51
1878	11.52	7.61	2.30	1.25	.68	none	none	none	.25	.34	.88	.01	24.84	1877-78	26.69
1879	2.62	3.25	4.48	2.40	1.70	none	none	none	none	.22	7.15	3.66	20.48	1878-79	16.23
1880	1.33	1.22	.97	6.84	.28	none	none	none	none	none	none	8.73	19.37	1879-80	16.57
1881	4.50	1.93	.97	1.39	none	.35	none	none	.50	.25	1.87	2.37	14.13	1880-81	17.87
1882	1.24	1.87	2.34	1.51	.03	.07	none	none	.82	2.04	2.42	1.05	13.39	1881-82	12.25
1883	.91	.60	3.24	1.22	4.65	none	none	none	.54	1.04	.30	.54	13.04	1882-83	16.75
1884	3.67	4.07	6.53	4.03	none	3.02	none	none	.22	1.61	none	5.57	27.73	1883-84	22.75
1885	1.62	.15	.15	1.50	none	none	none	none	.06	.05	9.14	2.73	15.40	1884-85	10.82
1886	5.81	none	1.71	4.14	none	none	none	none	none	.59	none	1.39	13.64	1885-86	23.64
1887	.88	7.56	.75	1.90	none	none	none	none	none	none	.60	3.67	15.36	1886-87	13.07
1888	3.88	.97	2.80	.10	.77	none	none	none	.56	none	6.25	4.51	19.84	1887-88	12.79
1889	.19	.11	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1888-89	*11.62
Totals	58.98	40.13	35.32	28.53	9.64	4.04	.16	none	3.12	14.35	32.79	48.61	275.37	-----	209.84
Averages	3.409	2.361	2.208	1.783	0.602	0.289	0.011	none	0.195	0.884	2.049	3.038	17.211	-----	16.865

*Up to March 1, 1889.

MAXIMUM AND MINIMUM TEMPERATURE OF AUBURN, AND RAINFALL FOR 1888.

JANUARY.				FEBRUARY.			
	Max.	Min.	Rainfall.		Max.	Min.	Rainfall.
1	46.0	35.0	.33	1	50.0	43.0	.46
2	52.0	40.0	.83	2	51.5	33.0	-----
3	54.0	41.0	2.02	3	55.0	33.0	-----
4	53.0	29.5	-----	4	57.5	36.0	-----
5	39.5	30.5	-----	5	56.0	33.5	-----
6	43.5	21.0	1.08	6	58.0	35.5	-----
7	40.0	17.0	-----	7	58.0	34.0	-----
8	38.0	18.5	-----	8	59.0	37.0	-----
9	41.0	13.0	-----	9	57.0	36.5	-----
10	46.0	23.0	-----	10	55.0	43.5	.06
11	48.0	28.0	-----	11	59.5	48.0	.11
12	48.0	27.5	-----	12	59.5	49.0	.37
13	48.5	32.0	-----	13	57.0	39.5	.60
14	39.0	20.5	-----	14	56.5	42.0	-----
15	38.0	18.5	-----	15	62.0	38.5	.01
16	40.0	22.0	-----	16	64.0	38.0	-----
17	44.0	25.5	-----	17	57.5	39.5	-----
18	48.0	27.0	-----	18	58.5	44.0	-----
19	50.5	37.0	.06	19	60.5	34.5	-----
20	54.0	38.0	.07	20	64.5	36.0	-----
21	55.0	43.5	1.51	21	69.0	41.0	-----
22	59.0	45.5	1.17	22	68.0	46.5	-----
23	59.5	50.0	.62	23	69.0	44.0	-----
24	59.0	43.0	.63	24	68.0	42.5	-----
25	65.0	47.0	.01	25	69.0	42.0	-----
26	63.0	42.5	-----	26	71.0	44.0	-----
27	56.5	43.0	-----	27	68.0	46.0	-----
28	58.5	46.0	.12	28	56.0	37.5	-----
29	57.0	47.5	.03	29	56.0	27.5	-----
30	63.0	44.0	.23				
31	61.0	43.5	-----				
MARCH.				APRIL.			
1	48.0	31.0	-----	1	59.0	41.5	.42
2	46.0	34.5	.46	2	62.0	41.0	-----
3	47.0	32.0	.65	3	59.0	41.5	-----
4	45.5	37.5	.37	4	68.0	41.0	.36
5	51.0	36.5	.73	5	63.0	37.0	-----
6	58.0	33.5	.26	6	70.5	40.0	-----
7	57.0	38.0	-----	7	74.0	40.5	-----
8	59.0	41.5	-----	8	79.0	41.0	-----
9	57.0	34.0	-----	9	89.0	42.0	-----
10	58.0	34.5	-----	10	86.5	44.5	-----
11	62.0	38.0	-----	11	93.5	48.0	-----
12	67.5	41.0	-----	12	94.5	55.0	-----
13	60.5	46.5	.08	13	96.0	53.5	-----
14	66.5	39.5	.30	14	97.5	56.5	-----
15	70.0	37.5	-----	15	86.0	57.5	-----
16	77.0	44.0	-----	16	85.0	48.0	-----
17	77.5	45.5	-----	17	91.0	50.5	-----
18	69.0	46.0	-----	18	91.0	53.5	-----
19	67.0	45.5	-----	19	88.5	50.5	-----
20	81.0	43.5	-----	20	90.5	54.0	-----
21	73.5	41.5	-----	21	88.0	57.0	-----
22	69.5	46.5	-----	22	78.0	50.0	-----
23	60.5	44.5	-----	23	75.0	50.0	-----
24	62.5	39.5	-----	24	70.0	46.5	.01
25	63.0	41.0	-----	25	64.5	41.5	-----
26	72.0	38.0	-----	26	73.5	39.5	.10
27	76.0	36.0	-----	27	79.0	44.5	-----
28	68.0	39.5	-----	28	89.5	53.0	-----
29	60.0	41.5	-----	29	85.0	55.0	-----
30	56.0	41.0	-----	30	77.0	45.0	-----
31	52.5	44.5	1.18				

January—Average maximum, 50.5. Average minimum, 33.5. Rainfall, 8.71 inches.
February—Average maximum, 60.3. Average minimum, 39.2. Rainfall, 1.61 inches.
March—Average maximum, 62.5. Average minimum, 39.8. Rainfall, 4.03 inches.
April—Average maximum, 80.1. Average minimum, 47.3. Rainfall, .89 of an inch.

AUBURN TEMPERATURE—Continued.

MAY.	Max.	Min.	Rainfall.	JUNE.	Max.	Min.	Rainfall.
1	71.0	43.0	-----	1	69.5	56.5	-----
2	76.0	44.0	-----	2	76.0	53.5	.11
3	68.0	44.5	.01	3	70.0	47.5	.05
4	74.0	46.5	.26	4	73.0	45.5	-----
5	78.0	46.5	-----	5	83.0	49.0	-----
6	79.0	52.0	-----	6	71.0	48.5	-----
7	76.0	45.5	-----	7	75.5	43.0	.15
8	80.0	46.5	-----	8	84.5	50.5	-----
9	83.0	49.0	-----	9	82.5	57.0	-----
10	84.5	53.5	-----	10	81.0	48.0	-----
11	90.0	52.0	-----	11	87.0	54.0	-----
12	88.0	59.0	-----	12	80.0	52.5	-----
13	78.5	59.0	-----	13	81.0	56.0	.05
14	78.5	49.5	-----	14	79.5	58.0	-----
15	69.0	47.5	-----	15	77.0	53.0	.27
16	78.0	49.0	-----	16	79.0	49.0	-----
17	78.0	48.0	-----	17	70.5	51.5	.13
18	78.0	49.5	-----	18	76.0	47.0	.28
19	72.0	44.0	-----	19	70.5	51.5	.07
20	71.0	39.0	-----	20	86.0	50.0	.08
21	74.0	38.0	-----	21	92.0	59.0	-----
22	70.0	42.0	-----	22	94.5	62.0	-----
23	68.0	42.5	-----	23	91.0	58.0	-----
24	68.0	41.0	-----	24	90.5	55.0	-----
25	64.0	43.5	.20	25	86.0	55.5	-----
26	68.0	47.0	.29	26	91.0	57.0	-----
27	76.0	43.5	-----	27	84.0	54.0	-----
28	84.0	52.0	-----	28	76.0	48.5	-----
29	86.0	53.0	-----	29	79.5	48.5	-----
30	80.0	57.0	-----	30	85.0	50.5	-----
31	76.5	56.0	-----				
JULY.				AUGUST.			
1	93.0	55.0	-----	1	82.0	45.5	-----
2	95.0	59.0	-----	2	84.0	49.0	-----
3	99.0	62.0	-----	3	89.0	53.5	-----
4	93.0	62.5	-----	4	93.0	57.5	-----
5	90.0	54.0	-----	5	96.0	59.5	-----
6	93.0	55.5	-----	6	100.0	63.0	-----
7	88.5	52.5	-----	7	103.0	64.0	-----
8	82.0	47.0	-----	8	100.0	68.0	-----
9	84.0	47.5	-----	9	91.5	52.0	-----
10	82.5	49.5	-----	10	96.0	58.0	-----
11	76.0	53.5	-----	11	98.0	62.0	-----
12	81.0	48.5	-----	12	100.0	63.0	-----
13	90.5	53.5	-----	13	101.5	63.0	-----
14	97.0	60.0	-----	14	100.5	63.5	-----
15	102.0	63.0	-----	15	94.0	59.0	-----
16	105.0	70.0	-----	16	87.0	51.0	-----
17	100.0	69.5	-----	17	90.0	51.0	-----
18	101.0	69.0	-----	18	96.0	54.5	-----
19	99.5	66.0	-----	19	91.0	60.0	-----
20	101.0	68.0	-----	20	102.5	63.0	-----
21	96.0	70.0	-----	21	101.5	62.0	-----
22	100.5	67.0	-----	22	100.0	66.5	-----
23	97.0	65.5	-----	23	111.5	71.5	-----
24	92.0	64.0	-----	24	110.0	71.5	-----
25	87.0	53.0	-----	25	100.0	70.0	-----
26	86.5	52.0	-----	26	92.0	64.0	-----
27	90.0	51.0	-----	27	105.0	70.0	-----
28	88.0	49.0	-----	28	108.5	70.0	-----
29	91.5	51.0	-----	29	101.5	76.0	-----
30	89.5	60.5	-----	30	100.0	73.0	-----
31	76.0	51.0	-----	31	105.5	74.0	-----

May—Average maximum, 76.2. Average minimum, 47.9. Rainfall, .76 of an inch.

June—Average maximum, 80.8. Average minimum, 52.3. Rainfall, 1.19 inches.

July—Average maximum, 91.8. Average minimum, 57.7.

August—Average maximum, 97.7. Average minimum, 62.2.

AUBURN TEMPERATURE—Continued.

SEPTEMBER.				OCTOBER.			
	Max.	Min.	Rainfall.		Max.	Min.	Rainfall.
1	108.0	78.0	-----	1	76.0	53.0	-----
2	100.0	74.0	-----	2	78.0	54.0	-----
3	104.0	75.0	-----	3	79.5	58.0	-----
4	94.0	70.0	-----	4	84.0	59.0	-----
5	100.0	50.0	-----	5	83.5	60.0	-----
6	105.5	65.0	-----	6	76.0	50.0	-----
7	106.0	70.0	-----	7	75.5	50.0	-----
8	106.0	74.0	-----	8	77.0	49.0	-----
9	99.0	71.0	-----	9	81.0	55.0	-----
10	106.5	78.5	-----	10	85.0	60.0	-----
11	103.0	80.0	-----	11	88.5	61.0	-----
12	102.0	75.0	-----	12	86.0	60.0	-----
13	95.0	70.0	-----	13	81.0	49.0	-----
14	96.0	64.0	.05	14	82.0	56.0	-----
15	85.0	69.0	.25	15	84.0	57.0	-----
16	83.0	64.0	-----	16	78.0	53.0	-----
17	87.5	56.0	-----	17	69.0	48.0	-----
18	92.0	57.0	-----	18	84.0	55.0	-----
19	96.0	60.0	-----	19	78.0	50.0	-----
20	95.0	60.0	-----	20	86.5	47.0	-----
21	94.5	62.0	-----	21	78.0	52.0	-----
22	93.0	58.0	-----	22	82.0	55.0	-----
23	86.0	61.0	-----	23	79.0	50.0	-----
24	96.0	65.0	-----	24	68.0	52.0	-----
25	96.0	66.0	-----	25	68.0	48.0	-----
26	96.5	70.0	-----	26	69.0	45.0	-----
27	94.0	70.0	-----	27	73.0	48.0	-----
28	84.0	60.0	-----	28	78.0	50.0	-----
29	78.0	58.0	-----	29	78.0	54.0	-----
30	74.5	58.0	-----	30	67.5	49.0	-----
				31	65.0	48.0	-----
NOVEMBER.				DECEMBER.			
1	68.0	43.0	-----	1	49.0	37.0	-----
2	72.0	45.0	-----	2	63.0	42.0	.57
3	65.0	48.0	-----	3	55.0	36.0	.02
4	63.0	42.0	-----	4	57.0	40.0	-----
5	63.0	39.0	-----	5	58.0	40.0	-----
6	65.0	40.0	-----	6	53.5	38.0	-----
7	69.0	41.0	-----	7	48.0	31.0	-----
8	70.0	43.0	-----	8	51.0	33.0	-----
9	69.0	44.0	-----	9	54.5	41.0	1.21
10	70.0	45.0	-----	10	55.0	46.0	.11
11	65.0	43.0	-----	11	60.0	39.0	.36
12	66.0	45.0	-----	12	56.0	39.0	.32
13	66.0	46.0	-----	13	55.0	30.0	-----
14	65.0	48.0	-----	14	50.0	31.0	1.54
15	65.0	49.0	-----	15	52.0	42.0	.11
16	63.0	53.0	.61	16	59.0	53.0	.65
17	63.0	52.0	.95	17	59.5	40.0	.04
18	63.0	50.0	1.17	18	66.0	38.0	-----
19	65.0	47.0	-----	19	63.0	40.0	-----
20	67.0	8.0	-----	20	60.0	45.0	-----
21	67.5	8.0	.74	21	59.0	45.0	-----
22	52.0	3.0	-----	22	57.0	48.0	.06
23	59.0	7.0	.35	23	57.0	44.0	.64
24	61.0	39.0	-----	24	54.0	40.0	-----
25	56.0	40.0	-----	25	53.0	40.0	.16
26	58.5	42.0	.36	26	54.5	45.0	-----
27	60.5	41.0	-----	27	54.0	38.0	-----
28	56.0	30.0	-----	28	54.0	32.0	-----
29	52.5	29.0	-----	29	52.5	36.0	-----
30	56.5	33.0	-----	30	53.0	32.0	-----
				31	53.5	31.0	-----

September—Average maximum, 95.2. Average minimum, 66.2. Rainfall, .30 of an inch.

October—Average maximum, 80.5. Average minimum, 52.7.

November—Average maximum, 63.0. Average minimum, 42.7. Rainfall, 4.18 inches.

December—Average maximum, 55.0. Average minimum, 39.1. Rainfall, 5.79 inches.

Average maximum for 1888, 74.4. Average minimum for 1888, 48.7. Total rainfall during 1888, 27.46 inches.

Rainfall at Iowa Hill, Placer County.—Record of rainfall kept by C. F. Macy, from January 1, 1879, to June 1, 1883, at Strawberry Flat, near Iowa Hill: altitude 3,925 feet; and from June 1, 1883, to April 1, 1889, at Iowa Hill, Placer County; altitude, 2,825 feet above sea level:

[illegible]

* Up to May 1, 1889.

Weather at Iowa Hill for 1888.—Summary of the weather record kept by C. F. Macy, at Iowa Hill, Placer County, for the year 1888:

[illegible]

Georgetown, El Dorado County.—The rainfall at Georgetown, El Dorado County, was furnished by C. M. Fitzgerald, of the California Water and Mining Company, and extends from November, 1872, to date:

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for Year.	Season of.	Total for Season.
1872	4.08	13.05	3.05	3.11	.12	none	.03	none	none	.61	4.30	18.72	41.20	1872-73	46.43
1873	16.65	8.03	13.87	5.80	1.32	.20	none	none	none	3.86	.55	16.60	1.24	1873-74	63.67
1874	17.87	.04	5.07	.31	2.03	2.06	none	none	none	1.90	24.12	10.85	64.25	1874-75	46.31
1875	13.09	9.97	14.54	4.78	1.22	none	.77	none	none	11.47	.80	none	56.64	1875-76	81.24
1876	12.44	2.14	7.78	1.74	3.87	.24	none	none	none	1.03	4.30	1.97	35.51	1876-77	41.25
1877	16.21	22.78	10.92	2.99	.99	.12	none	none	.46	2.56	2.63	.48	60.37	1877-78	61.31
1878	11.24	12.41	17.57	9.65	3.39	.34	none	none	none	3.85	6.25	11.73	76.43	1878-79	60.96
1879	5.47	6.00	5.50	25.63	5.97	none	none	none	none	.18	.37	22.67	71.79	1879-80	70.40
1880	20.83	12.85	3.84	2.40	.40	2.28	none	none	2.02	4.23	3.30	10.32	62.47	1880-81	65.82
1881	8.59	5.88	10.44	7.11	2.06	.18	none	none	.16	7.75	7.00	3.31	52.48	1881-82	54.13
1882	4.70	3.08	8.73	3.87	7.34	none	none	none	1.60	4.10	1.94	3.50	38.86	1882-83	45.94
1883	7.53	13.80	19.94	15.07	1.52	3.65	none	.01	.80	3.54	.03	33.73	99.62	1883-84	72.65
1884	4.37	.82	.21	3.98	1.19	2.28	.03	none	1.16	none	20.77	7.03	40.87	1884-85	49.99
1885	18.32	1.16	7.75	15.04	1.76	.06	none	none	none	3.43	1.79	6.90	56.21	1885-86	73.08
1886	3.36	15.79	2.40	6.54	.93	.18	none	none	.53	none	1.44	7.66	38.83	1886-87	42.12
1887	12.39	2.79	5.47	1.05	.38	1.56	none	none	.41	none	4.67	7.99	36.95	1887-88	23.85
1888	.66	.68	12.29	2.77	---	---	---	---	---	---	---	---	---	1888-89	*23.51
Totals	178.01	131.27	149.40	111.84	33.49	13.15	.87	.01	7.34	48.51	98.89	164.70	898.06	---	899.05
Averages	10.471	7.722	8.788	6.579	2.093	.822	.054	.001	.459	3.032	5.817	9.688	56.129	---	56.190

* Up to May 1, 1889.

WEATHER SUMMARY AT GEORGETOWN.

By C. M. FITZGERALD, Observer.

Summary for April, 1888.

Monthly mean temperature	54.7
Mean maximum temperature	64.1
Mean minimum temperature	45.4
Mean of the maximum and minimum temperature	54.7
Highest thermometer	77.8
Lowest temperature	34.0
Total number of clear days	16
Total number of fair days	4
Total number of cloudy days	10
Total number of foggy days	Part of one day.
Total number of days rain fell	8
Total rainfall	2.77
Hail fell	On thirteenth, at 2 and 4 p. m.

Summary for May, 1888.

Mean maximum temperature	69.5
Mean minimum temperature	47.2
Mean of maximum and minimum temperature	58.3
Highest thermometer	82.0
Lowest temperature	39.5
Total number of clear days	22
Total number of fair days	3
Total number of cloudy days	6
Total number of days rain fell	5
Total rainfall	.38
First early cherries ripe	May sixth.
First strawberries	May tenth.

Summary for June, 1888.

Mean maximum temperature	75.0
Mean minimum temperature	51.7
Mean of the maximum and minimum temperature	63.3
Highest thermometer	90.5
Lowest temperature	41.0
Total number of clear days	16
Total number of fair days	6
Total number of cloudy days	8
Total number of days rain fell	5
Total rainfall	1.56

Brilliant solar halos—eighth, eleventh, fourteenth, and twenty-third.

Summary for July, 1888.

Mean maximum temperature	89.6
Mean minimum temperature	61.9
Mean of the maximum and minimum temperature	75.7
Highest thermometer	98.7
Lowest temperature	45.5
Total number of clear days	29
Total number of fair days	1
Total number of cloudy days	1
Total number of days rain fell	1
Total rainfall	.04

Summary for September, 1888.

Mean maximum temperature	80.0
Highest thermometer	100.5
Total number of clear days	28
Total number of cloudy days	2
Total number of days rain fell	1
Total rainfall	.41

Summary for October, 1888.

Mean maximum temperature	74.3
Mean minimum temperature	50.2
Mean of the maximum and minimum temperature	62.2
Highest thermometer	84.0
Lowest temperature	43.7
Total number of clear days	26

Total number of fair days	4
Total number of cloudy days	1
Total rainfall	Sprinkle.
Total number of light frosts	2

Light sprinkle, inappreciable, on the twenty-fifth. First frost, very light, on the morning of the seventh; second frost, light, on the morning of the twenty-sixth. High wind from N.E. during night of seventeenth and following day.

Summary for November, 1888.

Mean maximum temperature	61.3
Mean minimum temperature	42.3
Mean of the maximum and minimum temperature	51.8
Highest thermometer	72.0
Lowest temperature	34.0
Total number of clear days	15
Total number of fair days	8
Total number of cloudy days	7
Total number of days rain fell	7
Total rainfall	4.67
Total number of heavy frosts	1

First heavy or killing frost occurred on morning of November twenty-first. Eggshell ice formed where water stood on boards. Lunar halo.

Summary for December, 1888.

Mean maximum temperature	54.5
Mean minimum temperature	39.1
Mean of the maximum and minimum temperature	46.8
Highest thermometer	68.0
Lowest temperature	31.5
Total number of clear days	11
Total number of fair days	6
Total number of cloudy days	14
Total number of days rain fell	13
Total rainfall	7.99

A little fog for a few hours on second and eleventh, on both days in afternoon. Lunar halo on twelfth, also on sixteenth. Hail fell at 4 P. M. of twenty-seventh.

Summary for January, 1889.

Mean maximum temperature	52.7
Mean minimum temperature	33.5
Mean of the maximum and minimum temperature	43.1
Highest thermometer	61.5
Lowest temperature	25.0
Total number of clear days	20
Total number of fair days	5
Total number of cloudy days	6
Total number of days rain fell	5
Total rainfall	.66

First snow thus far of the season fell on evening of seventeenth; just covered the ground; in the morning was about all gone.

Summary for February, 1889.

Mean minimum temperature	37.2
Lowest temperature	24.0
Total number of clear days	21
Total number of fair days	2
Total number of cloudy days	5
Total number of days rain fell	3
Total rainfall	.68

Summary for March, 1889.

Mean minimum temperature	41.4
Lowest temperature	32.0
Total number of clear days	15
Total number of fair days	4
Total number of cloudy days	12
Total number of days rain fell	12
Total rainfall	12.29

Placerville, El Dorado County.—The rainfall record at Placerville, El Dorado County, from October, 1879, to December, 1887, was furnished by Samuel Hale, Superintendent of the El Dorado Water and Deep Gravel Mining Company. After which time by Mr. Richard Rowland, Superintendent. Records were also kept from February, 1874, to February, 1877. The total for those years was, for eleven months in 1874, 33.23 inches; 1875, 44.84 inches; 1876, 39.21 inches; January and February, 1877, gave 11.05 inches:

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	Septem-ber.	October.	Novem-ber.	Decem-ber.	Total for Year.	Season of.	Total for Season.
1879	4.38	5.81	4.66	17.52	3.95	none	none	none	none	3.47	5.28	7.53	---	1879-80	52.60
1880	15.53	7.01	3.38	2.36	---	1.89	spring.	none	none	.35	.58	16.94	54.19	1880-81	48.04
1881	1.89	5.15	9.30	5.53	1.19	.13	spring.	none	.93	2.80	2.87	7.70	44.62	1881-82	42.46
1882	---	3.74	2.58	6.88	6.25	none	spring.	none	1.67	5.72	4.94	1.98	41.58	1882-83	36.56
1883	---	6.06	11.36	14.46	1.82	2.51	spring.	.03	.85	3.38	1.67	2.63	32.34	1883-84	57.36
1884	---	4.15	.97	.33	.27	1.42	none	none	.55	none	.10	22.65	74.11	1884-85	36.56
1885	---	13.03	1.15	5.22	1.75	.50	spring.	none	none	1.42	.91	5.22	32.20	1885-86	54.63
1886	---	3.18	14.18	2.09	.57	.28	none	none	.58	.06	1.42	8.94	36.37	1886-87	33.32
1887	---	11.27	2.39	5.26	1.10	.50	---	spring.	.88	spring.	---	7.06	35.39	1887-88	31.83
1888	---	1.03	---	---	---	---	---	---	---	---	---	---	---	1888-89	*25.63

* Up to April 1, 1889.

Rainfall at Vacaville, Solano County.—The following table of rainfall was furnished by Mr. A. V. Stevenson, and shows a record of rainfall by months, years, and seasons, from 1880 to date:

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	Septem-ber.	October.	Novem-ber.	Decem-ber.	Total for Year.	Season of.	Total for Season.
1880	3.48	2.28	2.73	8.26	7.58	1.78	none	none	none	none	.07	21.25	47.43	1879-80	36.81
1881	15.61	4.58	1.13	2.36	none	none	none	none	none	.28	1.93	5.36	31.25	1880-81	45.00
1882	2.76	3.38	4.17	2.37	.19	none	none	none	1.10	3.11	3.77	1.15	22.00	1881-82	20.44
1883	2.45	2.11	6.26	2.03	5.63	none	none	none	none	2.24	.49	1.63	22.84	1882-83	27.61
1884	6.02	7.19	11.45	7.48	.24	none	none	none	.41	1.30	none	16.18	50.17	1883-84	36.74
1885	1.89	.28	.28	1.54	none	none	none	none	none	.30	15.98	5.68	25.95	1884-85	21.78
1886	8.74	.17	1.32	4.84	.05	none	none	none	none	.27	.14	2.23	17.79	1885-86	37.08
1887	1.34	9.40	1.06	2.65	none	none	none	none	.16	none	1.01	5.62	21.24	1886-87	17.12
1888	6.34	.45	4.21	.08	.04	.11	none	none	.71	none	5.77	5.35	23.06	1887-88	18.02
1889	.44	---	---	---	---	---	---	---	---	---	---	---	---	1888-89	*12.27
Totals	49.07	29.84	32.61	31.61	13.73	1.89	none	none	2.38	7.40	29.16	64.48	261.73	---	290.60
Averages	4.907	3.316	3.622	3.512	1.526	0.210	none	none	0.264	0.822	3.240	7.164	29.081	---	28.956

* Up to February 1, 1889.

NICOLAUS, SUTTER COUNTY.

Weather summary by months for 1888 at Nicolaus, Sutter County, furnished by Alvah Pendleton, Observer:

	JANUARY.				FEBRUARY.			
	1886.	1887.	1888.	1889.	1886.	1887.	1888.	1889.
Average temperature..	47.82	48.27	43.17	46.69	55.00	44.77	52.26	50.38
Highest temperature..	69.00	71.00	65.00	74.00	74.00	71.00	79.00	78.00
Lowest temperature...	31.00	30.00	18.00	29.00	38.00	32.00	34.00	31.00
Monthly range of temperature	38.00	41.00	47.00	45.00	36.00	39.00	45.00	47.00
Greatest daily range...	24.00	35.00	28.00	39.00	25.00	35.00	33.00	38.00
Least daily range.....	2.00	4.00	3.00	6.00	2.00	2.00	5.00	7.00
Average maximum temperature.....	53.48	59.58	51.19	59.25	62.89	53.75	65.38	63.81
Average minimum temperature.....	43.35	39.83	37.61	36.19	48.21	38.75	44.00	39.85
Mean daily range	10.13	9.75	13.58	23.06	14.68	15.00	21.38	23.96
Prevailing wind.....	S.	N.	N.	N.	N.W.	S.	N.	N.W.
Total precipitation	5.32	1.12	4.97	.14	.49	6.75	.70	.30
Total velocity of wind.....	3,563	3,969	3,969	3,133	3,937	3,926	3,032	3,032
Clear days	15	17	9	19	20	9	20	13
Fair days	2	1	4	4	4	3	3	6
Cloudy days	14	11	18	8	4	16	5	9
Days rain fell	10	6	15	3	6	12	4	3
Frosts	10	13	10	18	1	9	7	6

	MARCH.			APRIL.		
	1886.	1887.	1888.	1886.	1887.	1888.
Average temperature	52.45	59.56	57.49	56.58	60.71	65.30
Highest temperature	76.00	83.00	81.00	74.00	86.00	93.00
Lowest temperature	38.00	42.00	38.00	42.00	42.00	46.00
Monthly range of temperature	38.00	41.00	43.00	32.00	44.00	47.00
Greatest daily range	25.00	37.00	28.00	18.00	28.00	34.00
Least daily range	1.00	8.00	4.00	3.00	5.00	12.00
Average maximum temperature	59.93	72.12	67.51	63.56	71.43	79.76
Average minimum temperature	45.74	49.61	50.61	51.20	53.23	55.36
Mean daily range	14.19	22.51	16.90	12.36	18.20	24.40
Prevailing wind.....	S.E.	S.	S. & N.	S.W.	S. & W.	S.
Total precipitation	1.50	.96	2.83	4.93	2.22	.04
Total velocity of wind.....	3,470	6,471	4,669	3,180	22	3
Clear days	17	21	15	17	16	22
Fair days	5	2	2	2	4	3
Cloudy days	9	8	14	11	10	6
Days rain fell	12	4	8	12	8	1
Frosts	1	1	1	1	0	0

WEATHER AT NICOLAUS—Continued.

	MAY.			JUNE.		
	1886.	1887.	1888.	1886.	1887.	1888.
Average temperature.....	64.07	65.50	64.71	75.39	72.45	68.89
Highest temperature.....	88.00	102.00	91.00	100.00	102.00	95.00
Lowest temperature.....	53.00	46.00	54.00	60.00	50.00	56.00
Monthly range of temperature.....	35.00	56.00	37.00	40.00	52.00	39.00
Greatest daily range.....	24.00	31.00	29.00	24.00	31.00	26.00
Least daily range.....	5.00	10.00	11.00	4.00	10.00	10.00
Average maximum temperature.....	73.61	76.45	77.41	86.00	83.63	81.00
Average minimum temperature.....	59.70	57.38	57.45	69.00	66.01	63.30
Mean daily range.....	13.91	19.07	19.96	17.00	17.62	17.70
Prevailing wind.....	S.W.	S.	S.	N.W.	S.W.	S.W.
Total precipitation.....	.15	.01	.55	.00	3.04	.15
Total velocity of wind.....	3,461	4,509	4,883	-----	4,375	4,200
Clear days.....	25	19	9	30	25	25
Fair days.....	1	4	9	0	3	14
Cloudy days.....	5	10	13	0	2	11
Days rain fell.....	1	4	5	0	3	4
Frosts.....	0	1	0	0	1	0

	JULY.			AUGUST.		
	1886.	1887.	1888.	1886.	1887.	1888.
Average temperature.....	79.79	75.04	75.52	78.02	72.40	76.52
Highest temperature.....	111.00	99.00	104.00	101.00	99.00	105.00
Lowest temperature.....	62.00	52.00	57.00	58.00	52.00	56.00
Monthly range of temperature.....	49.00	47.00	47.00	43.00	47.00	49.00
Greatest daily range.....	26.00	33.00	33.00	27.00	33.00	40.00
Least daily range.....	10.00	16.00	14.00	10.00	17.00	22.00
Average maximum temperature.....	88.53	90.00	90.60	91.80	87.93	96.32
Average minimum temperature.....	72.86	64.70	70.83	69.70	62.36	63.80
Mean daily range.....	15.67	25.30	19.77	22.10	25.57	32.52
Prevailing wind.....	S.W.	S.	S.	S.	S.	S. & W.
Total precipitation.....	.00	.00	.03	trace	.00	spring.
Total velocity of wind.....	-----	4,738	4,556	-----	3,968	2,962
Clear days.....	31	27	26	29	24	29
Fair days.....	0	3	2	1	3	1
Cloudy days.....	0	1	3	1	4	1
Days rain fell.....	0	0	1	0	0	0
Frosts.....	0	0	0	0	0	0

TRANSACTIONS OF THE
WEATHER AT NICOLAUS—Continued.

	SEPTEMBER.			OCTOBER.		
	1886.	1887.	1888.	1886.	1887.	1888.
Average temperature	72.21	70.91	75.57	60.00	68.60	65.62
Highest temperature	99.00	100.00	106.00	92.00	96.00	90.00
Lowest temperature	54.00	54.00	58.00	41.00	50.00	44.00
Monthly range of temperature	45.00	46.00	48.00	51.00	46.00	46.00
Greatest daily range of temperature	41.00	38.00	39.00	36.00	36.00	36.00
Least daily range of temperature	20.00	15.00	13.00	4.00	14.00	20.00
Average maximum temperature	88.73	87.01	92.70	74.48	85.01	82.38
Average minimum temperature	61.13	60.56	65.03	49.64	60.51	53.53
Mean daily range of temperature	27.60	26.45	27.67	24.84	24.50	28.85
Prevailing wind	S.E.	S.	N.	N.W.	N.	S.
Total precipitation	.00	.01	.82	.89	.00	.00
Total velocity of wind		3,031	3,180		3,488	4,360
Clear days	27	21	23	20	27	25
Fair days	1	2	4	4	2	4
Cloudy days	2	7	3	7	2	2
Days rain fell	0	3	2	4	0	0
Frosts	0	0	0	2	0	1

	NOVEMBER.			DECEMBER.			
	1886.	1887.	1888.	1885.	1886.	1887.	1888.
Average temperature	52.95	54.30	53.04	50.77	50.00	48.91	49.93
Highest temperature	76.00	79.00	78.00	64.00	74.00	72.00	65.00
Lowest temperature	31.00	26.00	31.00	40.00	31.00	29.00	36.00
Monthly range of temperature	45.00	53.00	47.00	24.00	45.00	43.00	29.00
Greatest daily range of temperature	40.00	41.00	39.00	18.00	39.00	36.00	21.00
Least daily range of temperature	14.00	9.00	2.00	1.00	5.00	4.00	3.00
Average maximum temperature	66.96	69.53	66.06	54.03	61.01	61.74	59.25
Average minimum temperature	40.70	43.40	45.40	49.77	47.87	39.74	36.19
Mean daily range of temperature	26.26	26.13	20.66	4.26	13.14	22.00	23.06
Prevailing wind	N.	N.	N. & S.		N.W.	N.	S.
Total precipitation	.04	1.00	3.27	5.03	1.99	3.02	5.25
Total velocity of wind		2,398	3,152			5,084	2,739
Clear days	20	18	10	20	13	10	3
Fair days	2	2	0	1	4	4	3
Cloudy days	8	10	20	10	14	17	25
Days rain fell	2	4	7	10	12	10	14
Frosts	1	6	4		3	12	7

Rainfall at Grass Valley, Nevada County.—The rainfall that goes to make up the following table for Nevada County was taken at Grass Valley, by Mr. Loutzenheiser, beginning with January, 1873, to date:

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for Year.	Season of.	Total for Season.
1873	4.01	12.50	1.39	2.32	2.56	none	none	none	none	.83	2.99	19.01	45.61	1872-73	40.00
1874	13.71	6.93	11.71	3.76	1.05	.10	none	none	none	2.95	15.91	1.08	57.20	1873-74	60.09
1875	15.56	1.39	4.14	.29	1.18	2.28	none	none	none	.97	16.99	7.44	50.24	1874-75	44.78
1876	12.01	10.75	12.47	2.80	1.23	.65	none	none	.06	8.72	.62	none	49.31	1875-76	65.31
1877	10.18	2.44	4.79	1.14	1.40	.74	none	none	none	1.21	3.78	1.74	27.42	1876-77	30.09
1878	15.74	17.76	10.18	2.78	.59	none	none	none	.68	2.09	2.54	.75	53.11	1877-78	53.78
1879	10.72	11.51	18.07	7.08	3.08	.30	none	.08	none	2.79	6.54	8.86	69.03	1878-79	56.82
1880	6.40	4.83	4.07	23.31	6.23	.09	none	none	none	.04	.30	22.69	67.96	1879-80	63.20
1881	19.20	8.50	3.33	1.85	.05	1.50	none	none	1.25	3.71	3.52	8.21	51.12	1880-81	57.46
1882	6.03	6.30	7.96	5.29	1.18	.05	none	none	1.88	7.88	4.78	2.83	44.61	1881-82	43.93
1883	3.05	2.97	9.25	2.38	5.77	none	none	none	1.44	3.03	1.48	2.31	31.68	1882-83	40.79
1884	7.80	10.27	13.98	10.98	1.00	2.30	none	none	.98	3.30	.05	28.39	79.05	1883-84	54.59
1885	3.65	1.76	.83	3.17	.16	.90	none	none	2.65	none	19.27	6.36	38.75	1884-85	43.19
1886	12.40	1.43	4.83	11.33	1.09	none	none	none	none	1.66	.67	5.46	38.92	1885-86	59.41
1887	3.38	15.72	1.69	6.54	.64	.52	none	none	.26	none	1.38	6.85	36.98	1886-87	36.28
1888	11.81	2.59	5.22	.50	.38	2.21	.06	none	.50	none	4.03	7.94	35.24	1887-88	31.20
1889	.58	.97	11.93	3.56	-----	-----	-----	-----	-----	-----	-----	-----	-----	1888-89	*28.60
Totals	157.23	118.62	125.84	89.11	27.59	12.09	.06	.08	9.70	39.18	84.85	129.92	776.23	-----	780.92
Averages	9.249	6.978	7.402	5.242	1.724	.756	.004	.005	.606	2.449	5.303	8.120	48.514	-----	48.808

* Up to May 1, 1889.

West Butte, Sutter County.—The report of rainfall at West Butte, Sutter County, was furnished by A. S. Noyes, and covers a period from November, 1879, to date:

YEAR.	January	February	March	April	May	June	July	August	September	October	November	December	Total for Year.	Season of.	Total for Season.
1879														1879-80	13.25
1880	.62	.75	.75	5.88	.62	none	none	none	none	none	2.38	2.25	14.00	1880-81	12.20
1881	3.69	1.38	.75	1.06	none	none	none	none	.31	1.12	none	5.38	10.63	1881-82	12.26
1882	1.88	2.31	2.57	1.19	.50	none	none	none	.25	.88	.38	2.00	12.45	1882-83	12.44
1883	.75	.19	3.06	.88	3.56	none	none	none	.62	.81	2.62	.25	12.45	1883-84	19.80
1884	3.81	2.12	6.50	3.75	.25	1.75	none	none	.57	1.00	none	.19	10.06	1884-85	12.13
1885	2.00	.50	.37	2.12	.18	.45	none	none	.18	.56	7.45	3.65	17.46	1885-86	23.10
1886	4.75	.70	1.50	4.19	.12	none	none	none	none	.50	.44	.67	12.87	1886-87	11.19
1887	.50	6.06	.82	2.20	none	none	none	none	none	none	.75	1.50	11.83	1887-88	10.55
1888	3.55	1.12	2.67	.30	.36	none	none	none	.75	none	3.25	6.00	18.30	1888-89	*11.11
1889	.12	.36	5.78	.63											
Totals	21.67	15.49	24.77	22.20	5.59	2.50	none	none	2.68	4.87	17.27	26.83	132.29		126.92
Averages	2.167	1.549	2.477	2.220	.621	.278	none	none	.298	.541	1.727	2.683	14.699		14.102

* Up to May 1, 1889.

TEMPERATURE AND RAINFALL AT WHEATLAND FOR THE YEAR 1888.

MONTH.	Highest Temperature.	Lowest Temperature.	Mean Temperature.	Rainfall, in Inches.
January	64	19	42.9	4.13
February	78	33	52.3	1.06
March	77	37	53.7	2.42
April	91	42	63.9	0.16
May	92	49	64.7	0.38
June	93	49	69.2	0.35
July	106	52	75.7	0.02
August	107	53	78.8	0.00
September	109	53	77.0	0.32
October	90	42	66.1	0.00
November	77	32	53.4	2.69
December	60	35	48.1	5.06
Sums	1,044	496	745.8	16.59
Means	87	41.3	62.1	-----

MARYSVILLE WEATHER FOR 1888, AND JANUARY, FEBRUARY, MARCH, AND APRIL, 1889.

[From the "Marysville Appeal."]

The weather record for Marysville, in 1888, is remarkable for exceptional cold in the month of January, and an unusually high degree of heat in the months of August and September. The past year had the coldest winter and the warmest summer of any year in the history of the place, so far as any record exists. The "Appeal" has taken pains to note and publish, from day to day, the extremes of temperature and other weather observations, and these have all been carefully tabulated, from month to month, so that the paper is now enabled, for the first time, to present a complete annual abstract.

One of the peculiarities of the past year was that April was warmer than May, the average temperature for the latter month falling one tenth of a degree below that for April. Usually, May is considerably warmer than its predecessor.

Summary for the Year 1888.

MONTH.	Highest Temperature.	Lowest Temperature.	Average Maximum.	Average Minimum.	Monthly Mean.	Clear Days.	Fair Days.	Cloudy Days.	Rain - Inches.
January	67	18	49.7	35.3	42.5	15	6	10	6.03
February	76	33	64.6	42.3	53.4	25	1	3	1.29
March	81	35	69.0	43.2	56.1	20	2	9	3.47
April	93	40	82.3	52.3	67.3	27	1	2	.09
May	92	44	81.7	52.7	67.2	14	2	5	.47
June	99	52	86.0	58.0	72.0	22	3	5	.34
July	101	55	90.7	62.1	76.4	31	0	0	-----
August	104	56	94.5	66.1	80.3	29	2	0	-----
September	102	60	91.3	65.3	78.3	28	0	2	.43
October	88	43	0.0	53.8	69.1	27	4	0	-----
November	72	36	63.0	44.8	55.7	18	5	7	4.66
December	64	36	56.0	44.6	50.3	6	6	19	6.63
Totals						272	32	62	23.46

The mean or average temperature for the year, was 63.9°.

The lowest temperature was 18° above zero, recorded on January fourteenth.

The highest temperature was 104°, recorded on August twenty-second.

There were fourteen dates on which the temperature fell to the freezing point or below. These were all in the month of January.

There were 68 days in which the temperature reached a maximum over 90°. Of these April had 3, May 3, June 7, July 16, August 24, and September 15.

Average winter temperature (December, 1877, January and February, 1888).....	47.1°
Average spring temperature (March, April, May)	63.5°
Average summer temperature (June, July, August)	76.2°
Average fall temperature (September, October, November)	67.0°
Winter rainfall (1887-88)	10.68 inches.
Spring rainfall	4.03 inches.
Summer rainfall	0.34 inch.
Autumn rainfall	5.14 inches.
Total rainfall for season of twelve months, ending June 30, 1888.....	16.33 inches.

Despite the fact that the past winter was the coldest on record here, its average temperature compares favorably with that of Nice, France, which is one of the most favored winter resorts on the Mediterranean. The average winter temperature at Nice is 47.8°, while that of Marysville last winter was 47.1°. Our average spring temperature in 1888 was 63.5°, while the average of that season at Nice is but 56°. The comparison could be extended to many other famous foreign resorts, with credit to Marysville.

One of the great advantages disclosed by the local record is the remarkable number of clear days, which is characteristic of our climate. The total number of clear days in Marysville last year (272), is far above the annual average at any of the noted European health resorts, or any locality near the coast of Southern California. The days classed as "fair," it should be understood, may be considered as fine days, being but partially cloudy.

The total number of days last year on which rain fell, was 58, distributed as follows: January, 13; February, 4; March, 8; April, 2; May, 2; June, 5; July, 1; September, 1; November, 8; December, 14.

The readings of temperature from which the record is made up, are taken from an accurate self-registering instrument, exposed in conformity with Signal Service rules.

Summary for January, 1889.

Average maximum temperature.....	55.4
Average minimum temperature	36.6
Average for month, temperature.....	46.0
Highest temperature	63.0
Lowest temperature	31.0
Rainfall, inches.....	0.13
Number of clear days.....	22
Number of fair days.....	3
Number of cloudy days.....	6

Summary for February, 1889.

Average 28 maximum readings	60.2
Average 28 minimum readings	39.8
Average for month, temperature.....	50.0
Highest temperature	75.0
Lowest temperature	31.0
Rainfall, inches.....	0.36
Number of clear days.....	15
Number of fair days.....	12
Number of cloudy days.....	1

Summary for March, 1889.

Average 31 maximum readings	69.7
Average 31 minimum readings	48.2
Average for month, temperature	58.9
Highest temperature	90.0
Lowest temperature	41.0
Rainfall, inches	8.25
Number of clear days	16
Number of fair days	6
Number of cloudy days	9

Summary for April, 1889.

Average 30 maximum readings	74.5
Average 30 minimum readings	52.5
Average temperature for month	63.5
Highest temperature	83.0
Lowest temperature	42.0
Rainfall, inches	1.18
Number of clear days	19
Number of fair days	5
Number of cloudy days	6

CLIMATE OF YUBA AND SUTTER COUNTIES COMPARED WITH THE EASTERN
AND THAT OF SOUTHERN CALIFORNIA.

[From the "Marysville Appeal."]

The climate, etc., of both Yuba and Sutter Counties, as well as of all other portions of this great and prosperous State, have been written up so fully and frequently of late that it is rather hard to produce anything that will be new in the way of comparative meteorology. The mean monthly average temperature for the counties named above, as deduced from observations of the railroad company for a number of years at Marysville, and of Mr. Lombard of Wheatland, as well as the record of Alvah Pendleton of Nicolaus, will be compared with eastern points as obtained from the Chief Signal Officer's annual report. By these comparisons we find the mean average temperature of Yuba and Sutter Counties for December to be equivalent to spring in Philadelphia; the Atlantic Coast of Virginia; Pittsburgh, Pennsylvania; Columbus, Ohio; Keokuk, Iowa; and Arizona; also Paris and Cannes, in France; and the same as December in Naples and Rome, in Italy.

For January the mean average temperature is equivalent to spring in New York City, northern Ohio, central Iowa, and southern Colorado.

For February the mean average temperature is equivalent to autumn in Boston, Massachusetts; Albany, Buffalo, and Oswego, New York; Detroit, Michigan; Chicago; central Iowa; Omaha, Nebraska; southern Colorado; and Cannes, France.

The mean average winter temperatures for Yuba and Sutter Counties are equivalent to April in Philadelphia; the Atlantic Coast of Virginia and northern Ohio; central Iowa; Omaha, Nebraska; and Paris, France; and also equivalent to May in Rhode Island and the Upper Lake region, and the eastern slope of the Rocky Mountains, north of Cheyenne, Wyoming Territory.

The average winter temperatures for Yuba and Sutter Counties are higher than those of Naples, Mentone, San Remo, Rome, Pisa, Genoa, Nice, and Florence, Italy; and Toulon, Marseilles, and Cannes, France.

The average winter temperatures of the two counties above named, as compared with places in the southern portion of the United States, are the same as Montgomery, Alabama; Vicksburg, Mississippi; and warmer than the winters in North Carolina; Augusta and Atlanta, Georgia; Shreveport,

Louisiana; Little Rock, Arkansas; any portion of Tennessee, and the greater portion of Texas and Arizona.

The above shows plainly and conclusively what all Sacramento Valley people know, and that is our winters are equivalent to spring in the Eastern States and as far south as Richmond, Virginia.

In the comparisons of the mean temperature by seasons with Marysville, Los Angeles, and Riverside, the figures make the average winter temperature the same at Marysville as Riverside, 50° ; Los Angeles, 54° . Mean spring temperature: Riverside, 67° ; Los Angeles, 58° ; and Marysville, 63° . Mean summer temperature: Riverside, 74° ; Los Angeles, 68° ; and Marysville, 78° . Mean fall temperature: Riverside, 66° ; Los Angeles, 63° ; and Marysville, 66° .

The average winter and fall temperature is the same in Marysville as at Riverside, while the mean spring temperature is higher at Riverside by 4° than at Marysville, but Marysville is 5° warmer during the spring than is Los Angeles.

The average summer temperature, of course, is warmer in Sutter and Yuba Counties than in Los Angeles and Riverside, being 4° warmer than Riverside and 10° warmer than Los Angeles. Notwithstanding the great difference between the average summer temperature of Marysville and Los Angeles, the latter place has as high a temperature (maximum) as Marysville. In fact, Los Angeles can boast of a maximum temperature of 99° and over for every month from March to October, as the following figures will show, both being railroad maximum figures:

Los Angeles: March, 106° ; April, 99° ; May, 104° ; June, 112° ; July, 100° ; August, 106° ; September, 106° ; October, 100° .

Marysville: March, 86° ; April, 91° ; May, 102° ; June, 108° ; July, 106° ; August, 106° ; September, 107° ; October, 98° .

The lowest minimum temperatures from 1874 to 1885 (inclusive) for both places, by the railroad reports, were 24° at Marysville and 28° at Los Angeles.

The average number of clear days in winter at Los Angeles is 47, as against 38 in Marysville; spring, Los Angeles 35, Marysville 49; summer, Los Angeles 37, Marysville 85; fall, Los Angeles 55, Marysville 69.

Oranges color here in the fall before they do at Los Angeles, because we have a warmer average temperature for autumn, and an average of 14 more clear sunshiny days than does Los Angeles.

It has been said by Los Angeles people that Sacramento has hotter nights during summer than they. The Chief Signal Officer's annual report for 1887 gives the average (4 A. M.) temperature for nine years, and from that record the following comparisons with Sacramento are made:

MONTH.	Los Angeles, 4 A. M.	Sacramento, 4 A. M.
May	54	55
June	58	59
July	60	61
August	61	60
September	58	58

Highest temperature, Signal Service records:

MONTH.	Los Angeles.	Sacramento.
May	100	98
June	104	102
July	99	105
August	106	108
September	108	106
October	102	98

Los Angeles temperature has reached 100° in May and 102° in October, something the records do not show for Sacramento. The average summer temperature at 4 A. M. for Sacramento is 60°—exactly the same as at Los Angeles. The average summer temperature at 12 M. is 81° at Sacramento and 79° at Los Angeles. The average temperature at 7 P. M. is 72° at Sacramento and 66° at Los Angeles. This is an excellent showing for the capital city. Although the last named place is warmer during the evening, on an average, than Los Angeles, Sacramento is just as cool in the morning as is the southern metropolis.

From these comparisons it is self evident that the Sacramento Valley, as judged by the records at Sacramento and those at Los Angeles, is as pleasant during the summer as at the latter city.

The average rainfall for Sutter and Yuba Counties is twenty inches, which is somewhat above Los Angeles, and very much above Riverside and Colton.

The average summer temperature at Colton is the same as at Marysville (78°), while the average autumn temperature is 1° less at Colton than Marysville. The highest temperature ever recorded at Colton was 116°, and the lowest 20°, while at Marysville the highest temperature was 108° and the lowest 20°—all railroad figures.

This does not look as though the climate around Marysville was colder in winter and hotter in summer than that of the country around Colton, and as the latter is within a few miles of Riverside, the comparisons should be somewhat similar, if a record for the same length of time could be obtained from Riverside by railroad figures. Below will be found the time of planting and maturing of staple products of Yuba and Sutter Counties:

KIND.	Planting.	Maturing.
Wheat	December and January	June.
Barley	December and January	June and July.
Oats	January and February	June and July.
Corn	February and March	June to August.
Beans	February and March	May to July.
Peas	February and March	April to June.
Tomatoes	February and March	May to July.

Rainfall at Colusa, Colusa County.—The rainfall, etc., from Colusa was furnished by J. D. McNary. The table gives the rainfall by seasons from 1872-73 to date, and by months from 1881 to date:

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for Year.	Season of.	Total for Season.
1872	---	---	---	---	---	---	---	---	---	---	---	---	---	1872-73	33.46
1873	---	---	---	---	---	---	---	---	---	---	---	---	---	1873-74	11.28
1874	---	---	---	---	---	---	---	---	---	---	---	---	---	1874-75	19.02
1875	---	---	---	---	---	---	---	---	---	---	---	---	---	1875-76	19.79
1876	---	---	---	---	---	---	---	---	---	---	---	---	---	1876-77	9.20
1877	---	---	---	---	---	---	---	---	---	---	---	---	---	1877-78	33.34
1878	---	---	---	---	---	---	---	---	---	---	---	---	---	1878-79	13.98
1879	---	---	---	---	---	---	---	---	---	---	---	---	---	1879-80	19.21
1880	---	---	---	---	---	---	---	---	---	---	---	---	---	1880-81	16.96
1881	3.70	2.27	.60	1.42	.34	none	none	none	1.19	none	.43	2.51	12.46	1881-82	22.62
1882	1.51	2.56	2.50	1.27	.04	.65	none	none	.23	1.19	1.73	.69	12.37	1882-83	11.66
1883	1.07	.37	2.36	.79	3.23	none	none	none	.68	.68	.11	.10	9.39	1883-84	29.75
1884	4.82	2.30	5.70	2.97	.12	2.88	none	none	.59	1.06	none	5.30	25.74	1884-85	11.69
1885	2.04	.58	.35	1.22	none	.55	none	none	.02	.79	7.69	3.98	17.22	1885-86	21.64
1886	4.57	.20	.64	3.65	.10	none	none	none	none	.65	none	1.25	11.06	1886-87	11.37
1887	.42	5.97	1.17	1.91	none	none	none	none	none	none	.60	1.90	11.97	1887-88	10.65
1888	3.32	1.08	2.46	.30	.60	.39	none	none	.74	none	3.83	5.69	18.41	1888-89	*10.99
1889	.30	.43	---	---	---	---	---	---	---	---	---	---	---	---	---

* Up to March 1, 1880.

METEOROLOGICAL DATA—WILLOWS, CALIFORNIA.

Furnished by MR. DAVID BENTLEY.

1888.	Maximum	Date	Minimum	Date	Mean Maximum	Mean Minimum	Monthly Mean	Monthly Range	Cloudy Days	Fair Days	Clear Days	Rainy Days	Mean Barometer	Rainfall	Prevailing Wind
January	63	27	17	15	50	35	42	46	14	7	10	9	30.12	3.68	N.
February	78	25	28	29	63	40	52	50	5	6	18	4	30.11	0.40	N.
March	78	16	32	5	65	41	53	46	6	6	19	6	30.03	1.69	S.
April	93	28	35	1	81	47	64	58	2	2	26	2	30.05	0.11	S.
May	100	12	43	23	84	51	68	57	5	4	22	1	29.93	0.16	S.
June	101	22	43	7	88	56	71	64	5	6	19	4	29.93	0.24	S.
July	111	20	51	8	99	61	80	60	1	1	29	1	29.97	0.06	S.
August	109	24	48	1	100	62	81	61	1	0	30	0	29.92	0.00	S.
September	109	11	52	29	95	62	79	55	1	3	26	1	29.91	0.38	N.
October	93	10	40	19	81	51	63	53	1	1	29	0	30.00	0.00	N.
November	74	1	33	11	64	45	55	41	9	4	17	7	30.08	3.33	N.
December	68	18	34	31	56	45	50	34	20	4	7	21	30.13	4.12	S.
	90	----	38	----	77	49	63	62	70	44	252	56	30.01½	14.17	S.

SEASONAL TEMPERATURES FOR PLACES IN COLUSA COUNTY.

	Princeton.	Williams.	Willows.	Orland.	College City.
Average winter temperature.....	48.2	47.5	45.7	52.6	48.4
Average spring temperature.....	61.4	61.7	63.0	65.1	63.3
Average summer temperature.....	78.7	79.6	81.5	81.7	76.6
Average fall temperature.....	63.3	63.6	64.5	67.6	60.9
Average yearly temperature.....	62.8	63.1	63.7	66.8	62.3
Highest temperature.....	114	114	112	113	114
Lowest temperature.....	19	19	19	22	19
Average rainfall—_inches.....	15.25	12.09	12.03	16.36	16.35

METEOROLOGICAL RECORD FOR THE YEAR 1888, AND SUMMARY FOR THE YEARS 1884-88, AT OROVILLE, BUTTE COUNTY.

By HIRAM ARENTS, of the United States Volunteer Signal Corps.

January, 1888—The cold wave that passed over the State this month was the longest continuous spell of cold weather and marked the lowest temperature of any period since 1849. It began January fourth, and was below 32° for fourteen days with but one exception. The following is from my daily record from Green's standard self-registering minimum thermometer: fourth, 30°; fifth, 28°; sixth, 30°; seventh, 26°; eighth, 25°; ninth, 27°; tenth, 29°; eleventh, 31°; twelfth, 29°; thirteenth, 39° (snow storm); fourteenth, 20°; fifteenth, 24°; sixteenth, 32°; seventeenth, 25°; eighteenth, 27°. On the thirteenth it moderated at 7:30 A. M.; the thermometer was 38°; a snow storm set in, lasting three hours; the snow melted as it fell, except on wooden situations. This was the first flake of snow seen in Oroville since February 11, 1884, when half an inch was left on the ground. The mean temperature for January was 45.40°, the lowest I have any record of, the average for the past five years being 49.52°. January, 1888, was 4° below the average. The highest temperature was 65°, or 4°

below the average; the lowest was 20°, or 10° below the average. The highest barometer was 30.52 on the seventeenth, the highest reading I have any record of; the lowest was 29.44; mean, 30.05. Clear days, 11; cloudy, 17; fair, 3. Rain fell for 13 days, and a trace on the 14th. Rainfall for the month, 7.72 inches; season, to date, 11.71 inches. Light frosts, none; heavy, none; hard, 13.

Summary for January, 1884 to 1888, at Oroville.

YEAR:	1884.	1885.	1886.	1887.	1888.	Average.
Mean temperature	50.45	53.23	48.18	50.28	45.41	49.51
Highest temperature.....	70.00	74.00	66.00	70.00	65.00	69.00
Lowest temperature.....	35.00	34.00	29.00	32.00	20.00	30.00
Clear days		16	18	24	11	17
Cloudy days		12	11	5	17	11.1
Fair days		3	2	2	3	2.2
Rainfall		2.10	5.17	1.02	7.72	4.0
Season to date		15.83	22.17	4.11	11.71	13.45
Light frost		1	2	7	-----	2.2

February, 1888—Was a pleasant month; at no time was the temperature at the freezing point; less than one inch of rain fell. The mean temperature was 55.2°, or about 2° above the average for the last five Februarys; the highest was 79°, about 6° above the average; lowest, 34°, or 1° below the average. The almonds and apricot trees were in full bloom by the fifteenth instant. Highest barometer was 30.25; lowest, 29.70; mean, 29.98. There were 21 clear, 4 cloudy, and 4 fair days. It rained part of 5 days; rainfall, .99, and for the season to date, 12.70. Prevailing winds were southerly. Light frost occurred on the second, third, sixth, and seventh. Thermometer at 6 A. M. at each date was 39°, 34°, 35°, 37°.

Summary for February, 1884 to 1888, at Oroville.

YEAR:	1884.	1885.	1886.	1887.	1888.	Average.
Mean temperature	49.46	59.16	57.10	47.30	55.20	53.53
Highest temperature	74.00	70.00	70.00	70.00	79.00	73.00
Lowest temperature	25.00	38.00	44.00	32.00	34.00	35.00
Clear days		18	18	15	21	18
Cloudy days		6	3	13	4	6.2
Fair days		4	7	0	4	3.3
Rainfall		0.73	0.36	8.93	0.99	2.75
Season to date		16.56	25.53	13.65	12.70	17.40
Light frost	7	1	1	4	4	3.2

March, 1888—Came in with a cold rain storm lasting four days; the rain was 1.64 inches. Range of the thermometer during the four days, highest, 64°; lowest, 40°. Mean for March was 56.03°; this was 4° below the average for the last five years; highest temperature, 78°; lowest, 40°. Highest barometer, 30.38; lowest, 29.54; mean, 29.94. Clear days, 19; cloudy, 6; fair, 6. Days that rain fell, 9; rainfall, 3.44; season to date, 16.14. Prevailing winds, southerly. No frost. On the third, a hail storm with thunder and zigzag lightning, lasting about fifteen minutes, followed by a light rain for half an hour, measuring .18 of an inch. Thermometer, 48°; barometer, 29.73. This month the nectarine, peach, plum, pear, apple, and on the twenty-fourth orange and lemon trees were in bloom.

Summary for March, 1884 to 1888, at Oroville.

YEAR:	1884.	1885.	1886.	1887.	1888.	Average.
Mean temperature	59.08	68.18	55.18	61.13	56.03	59.92
Highest temperature	80.00	86.00	75.00	84.00	78.00	80.00
Lowest temperature	40.00	46.00	40.00	37.00	40.00	40.00
Clear days		20	14	26	19	20
Cloudy days		6	13	3	6	7
Fair days		5	6	2	6	5
Rainfall		0.25	2.70	0.99	3.44	1.84
Season to date		16.81	25.23	14.31	16.31	18.17
Light frost	4	0	2	2	0	1.30

April, 1888—Was pleasant; the mean temperature was 66°, nearly 3° above the average for the last five Aprils. Highest for the month was 87°; lowest, 45°; highest barometer was 30.20; lowest, 29.77; mean, 29.958. Clear days, 26; cloudy, none; fair, 4. Days rain fell, 2; rainfall, .14 of an inch; season to date, 16.28. Winds, southerly. No frost. Saturday, twenty-eighth, at 8:45 P. M., a shock of earthquake was distinctly felt in this city, preceding the same was a rumbling noise. The oscillation was slight, and seemed to come from the southeast to northwest, but the trembling was more severe, shaking buildings and alarming the inmates, but doing no damage. Duration, about five seconds.

Summary for April, 1884 to 1888, at Oroville.

YEAR:	1884.	1885.	1886.	1887.	1888.	Average.
Mean temperature	60.53	64.75	60.28	62.12	66.00	62.94
Highest temperature	80.00	84.00	84.00	86.00	87.00	84.10
Lowest temperature	46.00	42.00	44.00	38.00	45.00	43.00
Clear days		13	13	21	26	18.10
Cloudy days		11	13	7	0	7.3
Fair days		6	4	2	4	4
Rainfall		1.64	5.48	2.81	0.14	2.27
Season to date		16.47	30.71	17.41	16.28	20.22
Light frost	0	0	0	0	0	0

May, 1888—Many persons considered May very cold, yet, when we compare the daily and monthly temperature with the former months of May, I find there was less variations and extreme changes between the highest and lowest temperature than any of the months mentioned. For instance, May, 1887, the highest temperature was 102°; lowest, 39°; average, 63°. 1888, highest, 90°; lowest, 51°; average, 69°; and yet the mean monthly temperature of this month was less than three fourths of a degree below the average of the last five years. The mean temperature was 69°, maximum, 90°; minimum, 51°; and the mean of the maximum was 77.1°, and of the minimum, 57.1°. Highest barometer, 30.02; lowest, 29.71; mean, 29.931. There were 21 clear, 6 cloudy, and 4 fair days. Rain fell on part of 5 days and a trace on 2. Rainfall for the month, .38 of an inch; season to date, 16.60. Prevailing winds, southerly. No frost. At 10 P. M. on the twelfth a light thunder storm passed over the town; course, from southeast to northwest; precipitation .05 of an inch. Also on the thirteenth at 4:30 P. M.; course, from east to west; rainfall, .05 of an inch.

Summary for May, 1884 to 1888, at Oroville.

YEAR :	1884.	1885.	1886.	1887.	1888.	Average.
Mean temperature	68.82	72.13	68.45	70.01	69.02	69.86
Highest temperature	88.00	96.00	90.00	102.00	90.00	93.10
Lowest temperature	51.00	52.00	52.00	39.00	51.00	49.00
Clear days	24	25	24	21	21	23.20
Cloudy days	4	4	2	6	4	4
Fair days	3	2	4	4	4	3.10
Rainfall		0.65	0.50	0.08	0.38	0.40
Season to date		19.10	31.21	17.49	16.60	21.10
Light frost	0	0	0	0	0	0

June, 1888—The temperature of June compares favorably with June in 1884 and 1885, the mean for the three months 1884, 72.70°; 1885, 73°; 1888, 72.03, and the maximum 94°, 90°, 93°, and the minimum 56°, 57°, 57°, showing the mean maximum and minimum for the three months was nearly of the same temperature. The highest barometer for this month was 30.02; lowest, 29.67; mean, 29.828; clear days, 20; cloudy, 7; fair 3. Rain fell on part of 5 days and a trace on 3; rainfall, 1.16; for the season, 17.76. More rain fell this month than any June recorded. Prevailing wind, southerly; no frost. On the third of this month a thunder and lightning storm occurred; the precipitation was .34 of an inch. Also, two well defined solar circles appeared around the sun on the eighth and eleventh; the latter was described by me, and published in the "Oroville Register" of the fourteenth. This was the most brilliant one I have ever seen, and attracted crowds of people on the streets for hours viewing the extraordinary phenomenon.

Summary for June, 1884 to 1888, at Oroville.

YEAR :	1884.	1885.	1886.	1887.	1888.	Average.
Mean temperature	72.70	73.00	79.12	76.09	72.03	74.59
Highest temperature	94.00	90.00	95.00	104.00	93.00	95.10
Lowest temperature	56.00	57.00	62.00	54.00	57.00	57.10
Clear days	21	30	24	20	24	24
Cloudy days	5	0	2	6	3	3.1
Fair days	4	0	4	4	4	3
Rainfall		0.39	0.00	0.18	1.16	0.43
Season to date		19.49	31.21	17.67	17.76	21.53
Light frost	0	0	0	0	0	0

July, 1888—Shows greater extremes of temperature than any July for five years. Although the mean temperature was an average one, 79.8°. The highest was 102°, nearly 2° above the average; the lowest, 56°, about 2° below the average. Extremes, 46°, nearly 5° above the average. There were more days the thermometer was above 90° than any of the past five Julys. In 1884 there were 15 days; 1885, 13; 1886, 14; 1887, 14; 1888, 16. Highest barometer, 30.18; lowest, 29.74; mean, 29.88. There were 28 clear days; 3 fair, none cloudy. There was .07 of an inch fell on the eleventh, the first rainfall recorded in July for five years. There was a trace on the seventeenth, twenty-first, and thirty-first, in 1885; there was a trace on the second, in 1866; and on the eighth, ninth, and twelfth, in 1887. Prevailing winds, southerly. No frost. A total eclipse of the moon occurred on Sunday, the eleventh; at 7:50 p. m. the moon entered the

shadow of the earth; the total eclipse beginning at 8:30 P. M. and ending at 10:30 P. M.; duration, one hour and forty minutes. During the passage of the earth's shadow across the moon, frequent flashes of diffused lighting was noticed in the east. No clouds were seen.

Summary for July, 1884 to 1888, at Oroville.

YEAR :	1884.	1885.	1886.	1887.	1888.	Average.
Mean temperature	79.76	78.80	81.16	78.75	79.08	79.51
Highest temperature	98.00	96.00	102.00	101.00	102.00	99.40
Lowest temperature	56.00	60.00	61.00	57.00	56.00	58.00
Clear days		31	30	30	28	29.30
Cloudy days		0	1	0	0	0.25
Fair days		0	0	1	3	1
Rainfall	.00	.00	.00	.00	.07	.01
Season to date	.00	.00	.00	.00	.07	.01
Light frost	0	0	0	0	0	0

August, 1888—Was one of peculiarities, although the mean temperature was an average one for the last five years. The maximum was the same as 1884, and 3° below 1885, yet the heat was more oppressive than either of these months, owing to the humidity of the atmosphere. It is seldom dew falls in this locality during the months of July and August. This year has been an exception to the past five; it could be plainly seen, almost every morning, on grasses and shrubbery. The latter part of this month warm nights prevailed—the twenty-ninth and thirtieth showed the highest temperatures at the 5 A. M. readings: At 5 A. M. on the twenty-ninth it was 76°; at 6 A. M., 72°; at 2 P. M., 92°; at 4 P. M., 105.5°, and at 9 P. M., 92°. The mean temperature for the twenty-four hours was 81.1°. During the nights of the twenty-ninth and thirtieth 82° was the lowest reading at 5 A. M. Number of days in August, for five years, the thermometer reached 90° and upwards: 1884, 24 days from 90° to 102°; 1885, 23 days from 90° to 105°; 1886, 16 days 90° to 96°; 1887, 10 days 90° to 97°; 1888, 23 days 90° to 102°. The mean temperature this month was 81.2°; maximum, 102°; minimum, 50°. Highest barometer, 30.02; lowest, 29.70; mean, 29.852. Number of clear days, 30; cloudy, 1; fair, none. No rain fell this month; for the season to date, 0.01 of an inch. Prevailing winds, southwesterly.

Summary for August, 1884 to 1888, at Oroville.

YEAR :	1884.	1885.	1886.	1887.	1888.	Average.
Mean temperature	82.17	82.11	81.16	76.22	81.02	80.54
Highest temperature	98.00	105.00	102.00	97.00	102.00	100.00
Lowest temperature	56.00	63.00	61.00	54.00	58.00	57.00
Clear days	30	25	30	30	30	29
Cloudy days	0	2	1	0	1	1
Fair days	1	4	0	1	0	1.1
Rainfall	.00	.00	.00	.01	.00	0
Season to date	.00	.00	.00	.01	.01	0
Light frost	0	0	0	0	0	0

September, 1888—Was the warmest month we have any record of. The mean temperature was over 5° above the average for the last five years. The highest for the month at 2 P. M. was, for the following dates, first, sixth, tenth, and eleventh, 102°, and at four P. M. on the first, sixth, and tenth, 103.5°; lowest at 6 A. M., 57°.

Commencing on the nineteenth of August and ending on September twelfth was the longest continuous spell of hot weather I have ever experienced. On the tenth and eleventh of September shows a higher daily mean temperature than in any other days of the present year—88.5° and 89°; the highest for these two days, 103.5°, 102°; lowest, 78° and 77.5°. On these two days the air was close and oppressive. Most people believe the temperature was higher than recorded. During the twenty-four days of this hot wave no time was the temperature below 90° at the 2 and 4 p. m. readings. The highest barometer was 30.00; lowest, 29.62; mean, 29.842; clear days, 25; cloudy, 2; fair, 3; days it rained, 3; trace, 1. Rainfall for the month, .63 of an inch, and the season to date, .70. Prevailing winds, southerly. At 6 A. M. on the fourteenth a light thunder and lightning shower of rain occurred. Its course was from north to south; precipitation, .04 of an inch. Also on the fifteenth three distinct thunder and lightning showers of rain. The one at 1 P. M. was the most severe; the peals of thunder were loud, and the flashes of lightning sharp, forked, and zigzag. Its course was from southeast to northwest; precipitation, .48 of an inch. Also one on the twenty-second passed east of town; course, north and south; precipitation, trace.

Summary for September, 1884 to 1888, at Oroville.

YEAR:	1884.	1885.	1886.	1887.	1888.	Average.
Mean temperature	72.73	69.25	74.19	75.25	80.00	74.28
Highest temperature	97.00	94.00	96.00	96.00	102.00	97.00
Lowest temperature	54.00	52.00	54.00	53.00	57.00	54.00
Clear days	21	21	30	20	25	25.2
Cloudy days	7	6	0	0	2	3
Fair days	2	4	0	4	3	2.3
Rainfall	2.27	.20	.00	.15	.63	0.65
Season to date	2.27	.20	.00	.16	.70	0.67
Light frost	0	0	0	0	0	0

October, 1888—Was one of the most pleasant and delightful months we have had for years, and at no time was the maximum temperature above 89°, and the minimum but five days below 50°. No rain or a trace fell this month. This has been the only October for five years I have not recorded a measure or trace. The mean temperature was 68°, nearly 2° above the average. Highest was 89°; lowest, 45°. Highest barometer, 30.12; lowest, 29.73; mean, 29.91. Number clear days, 30; cloudy, none; fair, 1. Rainfall, none; season to date, .70 of an inch. Prevailing winds, southerly. No frost this month. This mild and favorable October weather caused the oranges to commence coloring nicely, and before November expired many carloads were in condition for shipping.

Summary for October, 1884 to 1888, at Oroville.

YEAR:	1884.	1885.	1886.	1887.	1888.	Average.
Mean temperature	64.31	69.28	63.22	68.40	68.00	66.62
Highest temperature	87.00	94.00	87.00	91.00	89.00	89.30
Lowest temperature	46.00	52.00	43.00	45.00	45.00	46.10
Clear days	21	20	25	29	30	25
Cloudy days	7	6	5	0	0	2.20
Fair days	2	2	1	2	1	2
Rainfall	2.03	.00	.63	.00	.00	.54
Season to date	4.35	.20	.63	.16	.70	1.21
Light frost	0	0	0	0	0	0

November, 1888—The month just past has been one of slight variation in the temperature, and shows a better average than any of the Novembers of the last five years. The mean temperature was 56.5°, and the mean of the maximum 65.4°, and of the minimum 48°; the average would be 56.6°. The extremes between the mean maximum and mean minimum was but little over 17° for the entire month. The highest temperature for the month was 76° on the seventh; lowest, 38.5° on the fifth. Highest barometer, 30.18; lowest, 29.66; mean, 29.972. Number clear days, 22; cloudy, 6; fair, 2; foggy, 1. Days rained, 6—on the fifteenth, sixteenth, seventeenth, twentieth, twenty-second, and twenty-fifth. Rainfall, 4.14; for the season to date, 4.48. First frost of the season occurred on the twenty-seventh, and one the twenty-ninth; both were very light. Thermometer at 39° and 41°. Prevailing winds southerly.

Summary for November, 1884 to 1888, at Oroville.

YEAR:	1884.	1885.	1886.	1887.	1888.	Average.
Mean temperature	61.67	57.10	53.08	58.00	56.40	57.90
Maximum temperature	76.00	74.00	76.00	80.00	76.00	76.20
Minimum temperature	40.00	42.00	31.00	31.00	38.50	36.70
Clear days	25	7	25	21	22	20
Cloudy days	3	21	4	7	6	12.10
Fair days	2	2	1	2	2	1.40
Rainfall	.05	11.27	.29	1.21	4.14	3.39
Season to date	4.40	11.47	.92	1.37	4.84	4.60
Light frost	0	2	5	0	2	1.40

December, 1888—This month, for cloudy weather and the number of days it rained, has exceeded any December since 1884. The mean temperature was 50.2°, nearly 2° below the average for the past five Decembers; the maximum was 66°, 4° below the average, and the minimum 35°, an average for this month. The highest barometer was 30.28; lowest, 29.47; mean, 30.041. Number of clear days was 13; this was below the average for December. Cloudy days, 17; two above the average. Fair days, 1; three below the average. There were 12 rainy days—on the first, eighth, ninth, tenth, thirteenth, fourteenth, fifteenth, sixteenth, twenty-first, twenty-second, twenty-fourth, and twenty-sixth, a trace on the eleventh, twentieth, twenty-fourth, and twenty-ninth. Rainfall for the month, 8.91; and for the season to date, 13.75. Last season to this date, 3.99; excess this season, 9.76. There were two light frosts this month, on the thirtieth and thirty-first, thermometer at 38° and 35.5°. Prevailing winds, southerly. Number of days from south, 8; southwest, 7; west, 6; northwest, 1; northeast, 2; north, 1; east, 1. The daily weather predictions received at this station from Lieutenant Maxfield, Chief Signal Officer, San Francisco, for the month of December, have been verified in all except two instances, the fifteenth and twenty-fourth of the month. This shows over 92 per cent of the predictions verified. This we consider extraordinary and highly creditable to that officer. It must be remembered Oroville is out of the direct line of telegraph communication with that office, and not permitted to frank telegrams to the same. Our people watch my bulletin board for the daily predictions, and a short time after they are posted it is known over the city the state of the weather for the next twenty-four hours.

Summary for December, 1884 to 1888, at Oroville.

YEAR:	1884.	1885.	1886.	1887.	1888.	Average.
Mean temperature	53.66	53.00	52.25	51.00	50.20	52.00
Highest temperature	74.00	75.00	70.00	67.00	66.00	70.20
Lowest temperature	31.00	37.00	37.00	34.00	35.00	35.00
Clear days	12	15	15	17	13	14.20
Cloudy days	16	15	11	9	17	15.20
Fair days	3	1	5	5	1	3
Rainfall	9.33	5.53	2.75	2.60	8.91	5.83
Season to date	13.73	16.00	3.67	3.99	13.75	10.23
Light frost	2	0	4	7	2	3

The following annual summary for the years 1884, 1885, 1886, 1887, and 1888, is for Oroville:

It will be seen the average annual mean temperature for the five years was 64.15°; the highest was in 1885, 67.25°; lowest, in 1888, 60.15°. The annual maximum was highest in 1887, 87.4°; average, 84.43°; lowest in 1885, 82.60°. Minimum, the average was 45.16°; highest in 1885, 48.3°; lowest in 1887, 42.2°. The average number of clear days for the four years (leaving out 1884, as the record was but four months) was 266 days; the highest number in any one year was 287 in 1887, and the lowest was 236 in 1885. The average for cloudy days was 67; the highest in any one year was 91 in 1885, and the least, 48 in 1887. The average number of rainy days in the four years was 54, and 61 was the highest number in 1888, and 47 the lowest in 1887. The average annual rainfall for the four years was 21.54 in 1888, and the least was 17.88 in 1886. The average number of light frosts for the five years was 12.3, and of killing frosts, 6.3; the most light frost was 22 in 1887, and of killing, 13 in January, 1888.

Annual Summary for 1884 to 1888, at Oroville.

YEAR:	1884.	1885.	1886.	1887.	1888.	Average.
Mean temperature	64.60	67.25	64.28	64.53	60.10	64.15
Highest temperature	84.65	82.06	83.34	87.04	85.09	84.43
Lowest temperature	44.61	48.03	46.12	42.02	45.00	45.16
Clear days	*110	236	274	287	266	266
Cloudy days	*33	91	63	48	66	67
Fair days	*10	38	28	20	35	32
Rainfall	13.73	22.76	17.88	17.99	27.52	21.54
Light frost	16	4	13	22	8	12

* Four months record.

CHICO TEMPERATURE AND RAINFALL.

The following table shows the average temperature and rainfall by seasons, as deduced from fourteen years' observations, along with the highest and lowest temperatures:

	Seasonal Temperature— Degrees.	Seasonal Rain- fall—Inches and Tenths.
Average winter	47.3	11.52
Average spring	62.4	4.88
Average summer	81.3	.36
Average autumn	64.1	3.56
Average yearly	63.8	20.32
Highest temperature	108.0	-----
Lowest temperature	18.0	-----

Average monthly rainfall, as deduced from fourteen years of observation, at Chico:

MONTHS.	Inches.	MONTHS.	Inches.
January.....	4.23	August.....	.03
February.....	3.74	September.....	.26
March.....	2.94	October.....	1.11
April.....	1.58	November.....	2.19
May.....	.80	December.....	3.55
June.....	.30		
July.....	.04	Seasonal.....	20.32

Average monthly temperature, as deduced from fourteen years of observation at Chico:

MONTHS.	Degrees.	MONTHS.	Degrees.
January.....	44.0	August.....	81.9
February.....	49.8	September.....	75.3
March.....	56.5	October.....	64.8
April.....	61.9	November.....	52.3
May.....	68.7	December.....	46.1
June.....	78.0		
July.....	83.2	Year.....	63.5

Lowest temperature, 18°, in January, 1888, during the passage of the cold wave.

RAINFALL AT OROVILLE, BUTTE COUNTY.

The rainfall for Oroville was furnished by Mr. Hiram Arents, Signal Service Observer at that place, from September, 1884, to date:

YEAR:	1884.	1885.	1886.	1887.	1888.	1889.
January.....		2.10	6.13	1.02	7.72	.16
February.....		.73	.36	8.93	.99	.57
March.....		.25	2.70	.98	3.44	8.98
April.....		1.64	5.48	2.81	.14	
May.....		.65	.50	.08	.38	
June.....		.39	none	.18	1.16	
July.....		sprin.	sprin.	sprin.	.07	
August.....		none	sprin.	.01	none	
September.....	2.27	.20	none	.15	.63	
October.....	2.08	sprin.	.63	none	none	
November.....	.05	11.27	.29	1.21	4.14	
December.....	9.33	5.53	2.75	2.62	8.91	
Total for year.....	*13.73	22.76	18.84	17.99	27.52	
Season of.....		1884-85	1885-86	1886-87	1887-88	1888-89
Total for season.....		19.49	32.17	17.67	17.82	*19.46

* Up to April, 1889.

Annual Meteorological Review, for Red Bluff, Tehama County.—The following table shows the climatic condition in all its features for eleven years, from 1877 to 1888, both years inclusive, at Red Bluff, California, furnished by John J. McLean, Observer Signal Corps:

ANNUAL WEATHER REVIEW FOR:	1877.*	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.
Average barometer.....	30.03	29.58	29.64	29.65	29.65	29.64	29.67	29.62	29.65	29.65	29.64	29.97
Highest barometer.....	30.03	30.14	30.30	30.14	30.12	30.14	30.34	30.22	30.09	30.10	30.14	30.64
Lowest barometer.....	29.23	29.14	28.97	29.03	29.21	29.30	29.30	28.98	29.07	29.08	29.08	29.52
Range of barometer.....	1.14	64.0	1.32	1.11	.93	.85	1.13	1.24	1.02	1.11	1.06	1.12
Average temperature.....	108.0	64.0	63.3	61.2	62.1	60.2	61.5	60.8	64.4	63.2	64.4	64.5
Highest temperature.....	32.0	110.5	110.0	108.0	103.0	105.0	107.0	107.0	108.0	109.0	111.5	109.0
Lowest temperature.....	54.0	25.0	25.0	26.0	31.0	25.0	19.0	22.0	33.0	30.0	27.3	33.0
Range of temperature.....	34.0	85.5	85.0	82.0	72.0	80.0	88.0	85.0	75.0	79.0	84.2	76.5
Greatest monthly range of temperature.....	34.0	55.0	54.0	53.5	53.0	57.0	58.0	57.0	56.0	54.4	70.4	55.1
Least monthly range of temperature.....	34.0	25.0	36.0	27.5	32.5	30.0	39.0	35.5	32.5	34.5	35.9	25.6
Average maximum temperature.....	86.9	86.9	89.2	86.7	86.0	83.7	87.2	72.0	75.3	76.2	75.6	75.1
Average minimum temperature.....	41.4	41.4	39.8	39.8	41.1	39.5	39.8	49.7	52.8	52.4	51.4	52.2
Average range of temperature.....	45.5	45.5	47.8	47.0	45.1	43.9	47.3	44.0	44.8	46.6	50.0	46.2
Average humidity.....	53.2	53.2	52.5	51.4	55.1	58.0	55.1	59.3	57.5	55.3	47.0	52.5
Average dew point.....	N.	N.	N.	N.	N.	N.	41.5	43.5	45.2	42.8	39.5	41.7
Prevailing direction of wind.....	N.	N.	N.	N.	N.	N.	N.	N.	N.	N.	N.	N.
Total precipitation.....	8.54	49.01	33.64	26.53	24.93	21.82	13.76	28.06	29.63	17.21	13.60	24.94
Total velocity of wind.....	28.805	70,220	a	420,379	49,088	45,879	54,948	58,145	51,924	54,690	63,705	57,969
Maximum velocity of wind.....	30	46	52	60	42	40	36	48	44	50	45	45
Direction at time of maximum velocity.....	N.	S.E.	S.	S.E.	S.	S.	S.	S.	S.	S.E.	N. & S.	N. & S.
Total number of clear days.....	128	232	207	230	204	215	261	225	223	212	213	207
Total number of fair days.....	32	72	90	74	103	89	67	84	96	91	98	89
Total number of cloudy days.....	24	61	68	55	58	43	37	53	46	59	54	68
Total number of foggy days.....	a	a	a	a	0	0	5	0	2	2	0	1
Total number of days of precipitation.....	27	79	83	66	72	69	44	71	70	63	57	91
Number of earthquakes.....	0	2	0	0	2	0	0	1	0	0	2	0
Snow storms.....	a	a	a	a	a	0	0	1	0	0	2	4
Thunder and lightning.....	a	a	a	a	a	7	7	7	7	3	5	10
Number of solar halos.....	a	a	a	a	4	9	0	0	0	0	2	9
Number of lunar halos.....	a	a	a	a	3	2	3	5	2	14	14	10
Number of light frosts.....	a	a	a	a	17	19	9	21	16	14	10	16
Number of killing frosts.....	a	a	a	a	4	10	37	15	3	6	18	8
Number of days maximum temperature above 90°.....	69	93	84	71	59	60	94	53	77	89	99	88
Number of days minimum temperature below 32°.....	0	12	16	26	1	17	33	15	0	7	12	14

* Station opened July 1, 1877—Six months, 1877. a No record. b Five months.

METEOROLOGICAL REPORT OF OBSERVATIONS TAKEN AT ANDERSON, SHASTA COUNTY, CALIFORNIA, FOR 1888.

By Dr. ALBERT FUCH.

January—Highest barometer	29.90	July—Highest barometer	29.70
Lowest barometer	29.20	Lowest barometer	29.30
Mean barometer	29.52	Mean barometer	29.46
Highest temperature	61.0	Highest temperature	112.0
Lowest temperature	16.0	Lowest temperature	68.0
Mean temperature	43.5	Mean temperature	83.5
Rainfall	10.25	Rainfall	28
Prevailing direction wind	South.	Prevailing direction wind	North.
February—Highest barometer	29.92	August—Highest barometer	29.44
Lowest barometer	29.14	Lowest barometer	29.10
Mean barometer	29.47	Mean barometer	29.37
Highest temperature	78.0	Highest temperature	104.0
Lowest temperature	28.0	Lowest temperature	70.0
Mean temperature	51.40	Mean temperature	84.0
Rainfall	3.61	Rainfall .....	.....
Prevailing direction wind	South.	Prevailing direction wind	North.
March—Highest barometer	29.88	September—Highest barometer	29.60
Lowest barometer	29.04	Lowest barometer	29.19
Mean barometer	29.42	Mean barometer	29.377
Highest temperature	77.0	Highest temperature	105.0
Lowest temperature	30.0	Lowest temperature	58.0
Mean temperature	52.6	Mean temperature	81.0
Rainfall	9.50	Rainfall	0.61
Prevailing direction wind	South.	Prevailing direction wind	North.
April—Highest barometer	29.62	October—Highest barometer	29.67
Lowest barometer	29.12	Lowest barometer	29.20
Mean barometer	29.38	Mean barometer	29.43
Highest temperature	89.0	Highest temperature	90.0
Lowest temperature	45.0	Lowest temperature	46.0
Mean temperature	63.6	Mean temperature	63.0
Rainfall	.99	Rainfall .....	.....
Prevailing direction wind	North.	Prevailing direction wind	North.
May—Highest barometer	29.52	November—Highest barometer	29.57
Lowest barometer	29.20	Lowest barometer	29.06
Mean barometer	29.32	Mean barometer	29.37
Highest temperature	74.0	Highest temperature	72.0
Lowest temperature	54.0	Lowest temperature	32.0
Mean temperature	69.0	Mean temperature	52.9
Rainfall	.75	Rainfall	6.08
Prevailing direction wind	South.	Prevailing direction wind	South.
June—Highest barometer	29.52	December—Highest barometer	29.66
Lowest barometer	29.18	Lowest barometer	28.78
Mean barometer	29.37	Mean barometer	28.91
Highest temperature	98.0	Highest temperature	68.0
Lowest temperature	60.0	Lowest temperature	35.0
Mean temperature	68.8	Mean temperature	49.9
Rainfall	7.27	Rainfall	8.60
Prevailing direction wind	South.	Prevailing direction wind	South.

Total rainfall, 47.74 inches. Snow in January, 3.5 inches; in February, 2.5 inches. Altitude of Anderson, 432 feet. Latitude, 40° 38'; longitude, 122° 25'.

WEATHER SUMMARY FOR THE YEARS 1887 AND 1888, NEAR FORT JONES,
SISKIYOU COUNTY.

Furnished by ISAAC TITCOMB, Observer.

MONTH.	Monthly Mean.	Monthly Mean from 7 A. M. to 7 P. M.	Monthly Mean at 2 P. M.	Monthly Mean from 5 P. M. to 7 P. M.	Highest Temperature.	Lowest Temperature.	Rainfall and Melted Snow—Inches and Tenths.
January, 1887	35.1	28.5	41.4	35.3	58	16	5.18
February, 1887	30.3	23.1	37.6	30.1	55	10	4.96
March, 1887	43.8	33.5	56.5	41.4	67	25	1.07
April, 1887	45.2	35.4	56.0	44.3	76	26	2.63
May, 1887	54.9	42.2	68.5	53.9	96	25	0.94
June, 1887	59.5	44.9	75.4	58.2	96	35	0.36
July, 1887	67.7	50.9	85.2	66.9	98	39	0.37
August, 1887	65.3	49.6	80.7	65.6	93	37	0.18
September, 1887	60.5	46.0	75.2	60.3	87	35	0.36
October, 1887	54.3	40.6	67.7	54.7	80	30	0.09
November, 1887	42.1	33.9	50.3	42.1	72	18	1.75
December, 1887	33.6	28.2	38.6	34.0	46	21	5.88
Yearly average (for 1887)	49.4	38.1	61.1	48.9	98	10	23.77

Snowfall in January was 25 inches; snowfall in February, 66 inches; snowfall in March, inappreciable; snowfall in April, 5 inches; snowfall in May, 2 inches. Snowfall for the season, 109 inches. Rainfall for the year ending July thirty-first, 25.75 inches.

Summary for 1888.

January—This month was chiefly remarkable for its *cold term*, which commenced on the morning of the tenth and terminated on the morning of the nineteenth, with an interval of two days (eleventh and twelfth) of southerly wind. To explain: The previous month (December) was noted for frequent falls of snow and some rain, amounting to 44 inches of snow, and a total water-fall of 5.89 inches. This phase of weather continued until the third of January, giving a foot more of snow and 2.39 inches more of water-fall. It cleared off cold on the tenth, and continued below the freezing point until the nineteenth (except on the eleventh and twelfth), with a mean temperature of 12.3°, the coldest day being the twenty-four hours ending on the morning of the fifteenth, showing a mean temperature of 1.3° above zero. This period, according to reports received from various points, was probably the coldest weather that has occurred in northern California for thirty or more years. The remaining half of the month was mild, with occasional moderate rains, except the last four days, which gave a rainfall of 2.11 inches. The mean temperature of the month was 24.34°; the maximum (twenty-sixth), 52°; minimum (fourteenth), 6° below zero.

February—As January was unusually cold, so, on the other hand, February was unusually mild, and for the most part clear and pleasant, with but a few rainy days near the middle of the month. Mean temperature 46°; maximum temperature, 63° on the twenty-sixth, and the minimum, 16° on the twenty-ninth.

March—The weather was generally clear and pleasant, with but little rain or snow, but not so mild as February. Mean temperature was 38.2°; maximum, 67° on the twenty-seventh, and minimum, 14° on the ninth.

April—The weather was almost uniformly dry, clear, and pleasant, with very little rain—the first and last weeks being moderate in temperature, while the middle of the month was quite warm and spring like. Mean

temperature, 49.8°; maximum, 83° on the twentieth; minimum, 29° on the fifth.

May—This month was generally dry, clear, and pleasant in its weather aspects, with but seven moderately rainy days. The first and last parts of the month were moderate in temperature, and the middle the warmest portion of it; yet without great extremes of temperature. Mean temperature, 54.2°; maximum, 86° on the twelfth, and minimum, 35° on the twenty-first.

June—The weather was rather cold for the season, with two days of heavy rainfall in the first part of the month, and the same occurrence near the middle of the month—the latter portion being dry and pleasant, but cooler than usual on account of the prevailing winds being from the north. Mean temperature, 53.9°; maximum, 84° on the twentieth, and minimum, 36° on the twentieth.

July—It was almost uniformly dry and pleasant, with but two or three rainy days; the greater part of the month being moderate in temperature from prevalent northerly winds, with a week of pretty warm weather at the middle of the month. Mean temperature, 63.74°; maximum (twentieth), 94°; minimum (fifteenth), 43°.

August—It was clear and dry throughout, with one light thunder shower at the middle of the month. Owing to northerly winds the weather was moderate and equable, with but one or two very warm days. Mean temperature, 65.67°; maximum (twenty-ninth), 94°; minimum (first), 45°.

September—It was mainly dry and pleasant, with but seven days on which there were light thunder showers. The first half of the month was rather warmer than usual, the mean temperature being 65°; the last half was much cooler, with a mean temperature of about 59°—the mean of the whole month being 62.01°. Maximum (second), 92°; minimum (eighteenth), 40° (a light frost).

October—It was uncommonly dry, with but five days on which there were light rains. Good fall weather. Mean temperature, 50.47°; maximum (fourth), 79°; minimum (twenty-first), 32°.

November—The weather was mostly mild, with eleven moderately rainy days, and eleven fair days, the balance being cloudy and unsettled. Mean temperature, 40.62°; maximum (ninth), 57°; minimum (twenty-eighth), 23°.

December—It commenced with a week of good, pleasant weather; the middle of the month being moderately rainy and variable—the last part of it foggy or cloudy, and unsettled. The whole month was unusually mild in temperature. Mean temperature, 37.74°; maximum (twentieth), 55°; minimum (thirty-first), 26°.

The weather in 1888 was uncommonly dry in the spring months, though otherwise moderate and equable; but the unusually heavy precipitation in June sufficed to secure the well being of the farming interests; the absence of killing frosts still further tended to secure an abundant harvest, particularly of fruit. The temperature throughout the year, with the exception of the first half of January, was uncommonly uniform and equable, much nearer to the annual average than usual, though on this account less favorable to produce a water supply for the mining interest, which was comparatively a failure. Mean yearly temperature, 48.9°; highest, 94° on July twentieth, and lowest, 6° below zero on January fourteenth.

Scott Valley, Siskiyou County.—The rainfall for Scott Valley, Siskiyou County, was tabulated from the observations taken by Mr. Isaac Titcomb, of Walla Walla Creek, eight miles northwest of Fort Jones, beginning with August, 1889, being continuous to date:

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for Year.	Season of.	Total for Season.
1889								.50	.87	1.00	4.33	.75	23.52	1859-60	18.66
1890	2.59	1.25	4.12	.75	2.00	.40	1.62	.24	.49	2.22	2.00	5.74	23.52	1860-61	22.27
1891	1.12	2.50	2.50	3.00	.30	.30	none	none	none	.51	11.56	10.63	32.66	1861-62	40.86
1892	9.29	3.75	1.32	2.00	1.00	.80	.10	none	.02	.15	.12	1.90	20.45	1862-63	15.57
1893	4.75	1.75	2.45	2.00	4.00	1.93	.25	.09	.40	.25	1.85	6.17	22.29	1863-64	15.83
1894	2.07	.43	.82	2.70	.51	.31	none	.03	.04	.31	6.00	12.75	26.57	1864-65	25.82
1895	1.87	2.40	1.30	.32	.05	.75	.35	.02	1.15	1.33	9.79	1.21	20.54	1865-66	35.50
1896	6.59	3.50	9.20	.02	1.72	.62	.50	.47	none	.08	2.51	11.75	36.95	1866-67	28.88
1897	9.12	2.02	.64	1.31	.44	.01	none	.26	.40	.88	1.75	9.68	26.54	1867-68	23.61
1898	3.06	1.50	3.70	1.14	.18	1.06	none	none	.06	.50	.77	2.80	14.77	1868-69	18.16
1899	5.76	1.13	1.32	3.61	1.52	.69	.13	none	1.00	.01	3.04	3.56	16.79	1869-70	20.00
1870	5.00	2.91	1.73	1.12	1.12	.13	none	none	.01	.02	1.00	3.50	16.79	1870-71	13.56
1871	1.86	2.47	1.62	2.27	.55	.26	.35	none	.37	.05	1.62	7.68	19.10	1871-72	23.21
1872	4.18	6.94	1.40	.34	.25	.03	.01	.01	.41	.16	2.67	3.38	19.78	1872-73	13.82
1873	1.33	3.00	1.05	1.50	.27	.03	.03	.05	.37	.94	1.71	4.49	14.77	1873-74	21.81
1874	6.38	1.80	3.65	1.55	.71	.13	.01	.09	none	1.55	4.33	4.3	20.63	1874-75	12.72
1875	3.13	1.7	1.79	.35	.75	.12	.38	.05	none	4.45	7.31	7.33	25.83	1875-76	31.13
1876	2.26	3.33	3.94	.71	1.19	.18	.34	1.00	1.02	3.75	.54	.01	18.27	1876-77	19.12
1877	1.71	4.23	3.10	1.23	1.48	.71	.12	.02	.01	.45	.67	1.62	15.35	1877-78	23.47
1878	9.72	6.53	3.74	.27	.20	.12	.01	.03	.36	2.81	2.16	1.14	27.12	1878-79	26.05
1879	3.25	3.54	8.39	2.66	1.40	.27	.38	.47	.11	.81	4.64	4.58	30.50	1879-80	33.31
1880	10.62	2.32	2.65	5.39	1.32	.02	.37	.07	none	.18	.32	6.76	30.02	1880-81	31.37
1881	13.95	1.79	.79	1.19	.17	1.04	.54	.04	.76	3.53	2.40	4.60	35.54	1881-82	24.08
1882	4.48	5.69	2.22	2.45	1.29	.08	2.49	none	1.44	2.86	2.72	3.75	29.47	1882-83	24.36
1883	1.51	1.11	1.11	3.25	2.65	none	.40	.63	.66	2.41	1.11	4.75	21.05	1883-84	26.41
1884	2.58	3.14	3.45	3.06	1.65	.87	1.62	.01	.60	1.04	.16	8.18	28.06	1884-85	22.49
1885	2.50	3.49	.11	1.98	1.40	1.40	1.16	.85	.83	.53	10.24	3.26	26.91	1885-86	30.92
1886	7.22	1.32	1.32	3.23	1.77	.03	2.13	.85	none	1.85	.78	6.67	27.17	1886-87	27.40
1887	5.18	4.96	1.07	2.63	.94	.36	.37	.18	.36	.09	1.75	5.88	23.77	1887-88	25.20
1888	6.18	1.77	2.43	.18	1.80	4.21	.60	.11	.58	.40	1.94	1.59	21.79	1888-89	*7.33
1889	1.86	.25													

* Up to March 1, 1889.

TABLE SHOWING THE AVERAGE AND HIGHEST AND LOWEST TEMPERATURE AND RAINFALL FOR THE SACRAMENTO VALLEY COUNTIES.

STATIONS AND COUNTIES.	Elevation—Feet	Average Winter Temperature	Average Spring Temperature	Average Summer Temperature	Average Autumn Temperature	Average Annual Temperature	Highest Temperature	Lowest Temperature	Average Seasonal Rainfall—Inches
<i>Shasta County:</i>									
Redding	565	47.8	61.1	81.0	65.3	63.8	110	18	36.66
Anderson	432	50.0	59.3	80.7	60.2	62.6	114	20	39.97
<i>Tehama County:</i>									
Tehama	220	47.7	61.9	81.3	64.1	63.8	115	21	15.39
Red Bluff	307	46.8	59.8	79.7	63.2	62.4	110	16	27.46
<i>Butte County:</i>									
Chico	193	47.3	62.4	81.3	64.2	63.8	110	18	20.84
Oroville	171	52.0	64.5	78.8	64.3	64.9	102	20	22.11
<i>Colusa County:</i>									
Princeton	67	48.2	61.4	78.7	63.3	62.8	114	20	15.25
Williams	89	47.4	61.6	79.7	63.9	63.2	114	19	12.09
Willows	132	45.8	63.1	81.3	63.4	63.4	112	19	12.03
Orland	254	51.9	65.1	82.9	67.9	66.9	113	22	16.36
College City		48.4	63.3	76.6	60.9	62.3	114	20	16.35
<i>Sutter County:</i>									
Nicolaus	40	50.9	57.7	77.7	61.7	62.0	111	18	19.57
<i>Yuba County:</i>									
Marysville	69	50.1	62.7	78.3	65.6	64.2	108	18	16.60
<i>Placer County:</i>									
Rocklin	249	46.9	61.4	78.3	63.0	62.4	114	19	19.45
Auburn	1,363	46.2	56.4	74.3	61.7	59.7	106	13	33.15
Colfax	2,421	46.0	55.9	76.0	60.2	59.5	106	16	45.16
<i>El Dorado County:</i>									
Georgetown	2,750	50.0	59.0	85.0	67.0	64.0	102	11	60.04
<i>Amador County:</i>									
Ione	287	49.1	60.5	78.0	64.6	64.0	110	19	20.06
<i>Sacramento County:</i>									
Sacramento	35	48.3	59.5	71.6	61.6	60.2	106	19	19.80
Galt	49	48.5	61.7	76.4	62.6	62.3	108	19	15.70
Brighton	53	47.4	59.9	74.8	61.9	61.2	109	19	16.44
<i>Yolo County:</i>									
Knight's Landing	35	48.0	60.6	75.9	63.0	61.9	110	20	16.77
Woodland	45	48.3	61.6	77.7	63.8	62.8	106	18	16.59
Davisville	51	49.7	62.4	77.0	65.7	63.7	118	19	15.95
Dunnigan	65	47.8	63.6	79.9	65.4	64.2	118	20	16.48
<i>Solano County:</i>									
Fairfield or Suisun	12	49.7	61.4	73.1	65.2	62.4	110	18	20.10
South Vallejo	23	50.0	59.5	66.8	61.4	59.4	105	24	14.32
Benicia	64	46.6	56.8	67.6	60.7	57.9	105	26	15.97

MONTHLY WEATHER REPORT FOR 1888 OF EUREKA, HUMBOLDT COUNTY.

Prepared by MAURICE CONNELL, Observer Signal Corps.

MONTH.	Mean Tempera- ture	Maximum Tem- perature	Minimum Tem- perature	Days Below 32°	Mean Relative Humidity	Prevailing Wind	Maximum Wind Velocity	Clear Days	Fair Days	Cloudy Days	Days of Precipi- tation	Total Precipita- tion
January	44.6	77	20	11	84.5	S.E.	36	7	9	15	19	12.95
February	48.1	65	31	1	84.8	N.	36	6	13	10	10	1.98
March	47.7	68	32		79.1	N.	36	9	8	14	13	4.09
April	50.9	68	39		80.9	N.	33	6	15	9	10	1.05
May	53.0	71	44		85.1	N.	36	4	12	16	7	0.76
June	58.8	71	47		84.9	N.	34	2	13	15	15	4.66
July	56.6	73	48		88.0	N.	36	14	8	9	2	0.44
August	56.0	68	49		91.4	N.	24	9	8	14	0	trace
September	56.5	73	46		90.2	N.	36	14	7	9	3	0.06
October	53.0	67	40		91.0	N.	38	12	13	6	9	1.15
November	50.2	70	35		86.8	N.	34	8	7	15	14	3.41
December	53.0	66	38		83.8	S.E.	34	2	5	24	17	5.93
Totals				12				93	117	156	119	36.48
Means	52.4	77 in Jan.	20 in Jan.		85.9	N.	36					

One thunder storm during the year.

YEARLY WEATHER SUMMARY AT HYDESVILLE, CALIFORNIA.

By E. T. Foss, Observer.

Average rainfall from January to December	37.21 inches.
Greatest rainfall from January to December was in 1885	41.59 inches.
Least rainfall from January to December was in 1888	30.89 inches.
Average rainfall from July to June	37.28 inches.
Greatest rainfall from July to June was in 1886	55.70 inches.
Least rainfall from July to June was in 1885	26.91 inches.
Average rainfall from September to May	36.88 inches.
Greatest rainfall from September to May was in 1886	55.70 inches.
Least rainfall from September to May was in 1885	25.84 inches.

TEMPERATURE AND RAINFALL AT WHEATLAND.

The following monthly record of temperature and rainfall at Wheatland, Yuba County, was compiled and forwarded by Mr. William Lumbard, and shows the highest, lowest, mean temperature, and total rainfall for each month, and for the year 1887:

MONTH.	Highest Temperature.	Lowest Temperature.	Mean Temperature.	Rainfall, in Inches.
January	74	30	47.3	0.94
February	68	31	44.1	5.37
March	79	40	54.2	1.33
April	84	41	58.8	2.15
May	106	41	66.8	0.10
June	110	52	73.2	0.57
July	106	55	77.2	.00
August	101	52	74.1	.00
September	103	51	72.8	0.06
October	95	42	67.0	.00
November	78	29	54.7	0.50
December	62	30	45.4	2.01
Sums	1,066	494	73.56	13.03
Means	8.88	41.1	61.3	-----

METEOROLOGICAL REPORT OF NAPA CITY.

By W. H. MARTIN, Druggist.

Showing average temperature and average maximum and minimum temperature, highest and lowest temperature, and total precipitation from July, 1877, to date:

YEAR.	JULY.				AUGUST.			
	Mean.	Average Max.	Average Min.	Rain for Month.	Mean.	Average Max.	Average Min.	Rain for Month.
1877	67.8	79.9	55.7	.11	64.2	76.2	52.2	-----
1878	64.5	77.0	52.0	-----	64.5	75.8	53.2	.01
1879	64.0	75.1	52.9	-----	64.9	77.0	52.8	-----
1880	63.4	74.2	52.6	-----	62.2	74.9	49.5	-----
1881	65.9	78.4	53.5	-----	63.0	75.4	50.6	-----
1882	63.8	75.3	52.3	-----	62.4	73.7	51.1	-----
1883	63.4	74.7	52.1	-----	63.4	76.2	50.6	-----
1884	65.9	80.0	51.9	-----	62.8	76.2	49.4	-----
1885	64.2	73.3	55.1	-----	61.9	70.2	53.6	-----
1886	66.0	76.9	55.1	-----	65.5	77.0	54.0	-----
1887	61.0	71.7	50.3	-----	60.6	70.4	50.8	-----
1888	65.1	76.1	54.1	.03	65.9	77.3	54.5	-----
Averages	64.3	76.0	53.4	.01	64.6	76.0	53.0	-----

METEOROLOGICAL REPORT OF NAPA CITY—Continued.

YEAR.	SEPTEMBER.				OCTOBER.			
	Mean.	Average Max.	Average Min.	Rain for Month.	Mean.	Average Max.	Average Min.	Rain for Month.
1877	65.5	79.0	52.0	-----	58.0	69.3	46.7	.69
1878	61.5	74.3	48.9	1.50	58.8	70.0	47.7	2.54
1879	63.3	77.0	49.7	-----	60.7	74.8	46.6	.83
1880	61.5	74.4	48.6	-----	56.1	65.9	46.3	-----
1881	61.6	74.2	49.1	.26	53.9	64.1	43.7	.47
1882	63.7	73.5	54.0	.48	49.9	55.0	44.8	2.93
1883	64.2	76.1	52.4	1.10	55.6	63.6	47.7	1.69
1884	58.0	70.3	45.7	.21	54.4	64.6	44.2	1.62
1885	62.9	72.9	52.9	.07	58.6	68.1	49.2	.62
1886	62.0	73.0	51.0	-----	54.7	63.7	45.7	.89
1887	62.5	73.8	51.2	.22	61.2	72.8	49.6	-----
1888	65.1	75.6	54.6	1.08	59.3	70.0	48.7	-----
Averages	63.8	75.0	52.6	.41	57.9	68.2	47.6	1.02

YEAR.	NOVEMBER.				DECEMBER.			
	Mean.	Average Max.	Average Min.	Rain for Month.	Mean.	Average Max.	Average Min.	Rain for Month.
1877	52.6	61.1	44.2	1.82	46.8	55.0	38.6	1.86
1878	51.4	60.8	42.1	.95	45.0	55.0	35.0	1.15
1879	50.5	59.7	41.3	3.95	42.8	49.9	35.8	7.26
1880	48.9	59.8	38.1	.08	47.7	52.1	43.3	11.36
1881	49.1	59.3	39.0	1.59	44.3	51.1	37.6	4.31
1882	46.9	55.0	38.8	4.02	45.6	54.3	37.0	3.55
1883	47.2	56.5	38.0	.73	41.1	49.8	32.4	.63
1884	51.7	60.4	43.0	-----	47.9	55.9	39.9	10.32
1885	52.3	58.0	46.6	9.37	48.4	54.2	42.6	4.21
1886	47.5	57.1	37.9	.22	47.5	53.4	41.6	2.96
1887	50.8	60.8	40.8	1.55	45.1	52.5	37.8	3.71
1888	50.7	57.9	43.6	3.12	47.3	52.4	42.3	5.18
Averages	50.3	58.4	42.3	2.28	46.4	52.7	40.2	4.71

YEAR.	JANUARY.				FEBRUARY.			
	Mean.	Average Max.	Average Min.	Rain for Month.	Mean.	Average Max.	Average Min.	Rain for Month.
1878	48.1	54.6	41.6	15.31	48.2	55.1	42.3	13.82
1879	44.2	53.9	34.5	5.10	50.9	59.0	42.8	5.77
1880	42.0	50.3	33.8	3.64	46.0	53.8	38.2	2.19
1881	49.4	54.4	43.4	12.72	52.8	58.2	47.5	3.15
1882	43.0	50.6	35.4	3.22	43.2	50.8	35.6	3.65
1883	39.7	47.1	32.3	.92	42.8	50.6	35.0	1.00
1884	43.2	54.0	32.4	3.67	51.8	62.3	41.4	5.22
1885	43.4	49.2	37.7	1.77	50.6	57.8	43.4	.61
1886	44.7	49.6	39.8	7.86	51.1	59.1	43.1	.25
1887	45.1	53.0	37.2	1.70	41.0	48.0	34.0	10.62
1888	41.4	46.5	36.3	4.15	48.9	56.6	41.3	1.28
Averages	44.0	51.2	36.8	5.46	47.9	55.5	40.4	4.32

METEOROLOGICAL REPORT OF NAPA CITY—Continued.

YEAR.	MARCH.				APRIL.			
	Mean.	Average Max.	Average Min.	Rain for Month.	Mean.	Average Max.	Average Min.	Rain for Month.
1878	53.1	61.0	45.2	4.97	54.5	64.9	44.1	1.50
1879	54.0	64.1	46.6	9.40	56.6	65.5	47.8	2.38
1880	47.9	57.2	38.5	2.61	52.0	58.7	45.3	12.25
1881	51.4	60.6	42.3	1.35	56.5	65.0	48.0	1.59
1882	49.0	58.0	40.0	3.60	57.0	63.3	40.7	1.74
1883	50.9	58.4	43.4	5.53	51.8	61.3	42.3	1.85
1884	50.0	58.1	41.9	7.12	52.5	61.8	43.2	5.68
1885	54.0	62.4	45.6	.49	57.9	66.3	49.5	1.66
1886	48.8	57.8	39.8	1.22	52.5	59.6	45.4	3.82
1887	51.9	61.2	42.7	.48	54.6	64.3	44.9	2.03
1888	49.5	57.6	41.4	4.34	57.8	69.1	46.5	.47
Averages	51.0	59.6	42.4	3.74	54.8	63.6	45.2	3.18

YEAR.	MAY.				JUNE.			
	Mean.	Average Max.	Average Min.	Rain for Month.	Mean.	Average Max.	Average Min.	Rain for Month.
1878	59.8	70.6	49.0	.40	64.0	75.1	52.9	-----
1879	56.9	65.8	48.1	1.53	64.8	76.8	52.8	0.5
1880	59.1	69.2	49.0	1.39	61.8	73.7	49.9	-----
1881	60.1	72.7	47.6	.11	61.3	73.3	49.3	.72
1882	59.0	71.3	46.7	.15	60.6	71.0	50.2	-----
1883	57.7	69.6	45.7	5.25	67.2	79.1	55.3	-----
1884	59.1	70.1	48.1	.35	60.6	69.6	51.6	2.72
1885	58.7	69.6	49.9	.05	60.6	69.1	52.1	.04
1886	58.0	68.0	48.0	.32	63.7	74.9	52.5	-----
1887	57.6	67.6	47.6	.05	63.1	74.7	51.5	-----
1888	57.2	65.8	48.6	.94	63.5	73.9	53.1	.42
Averages	58.5	69.1	48.0	.96	62.8	73.7	51.9	.36

The following yearly mean temperature and rainfall is for the year beginning with July and ending with June, and not for the twelve calendar months, and furnished by W. H. Martin, druggist, of Napa:

YEAR.	AVERAGE.			RAIN.
	Yearly Mean.	Yearly Max.	Yearly Min.	
1877-78	56.9	66.8	47.6	40.48
1878-79	56.0	66.5	45.9	30.38
1879-80	54.6	64.7	44.4	34.12
1880-81	55.9	65.5	46.4	31.08
1881-82	53.7	63.9	43.5	18.99
1882-83	53.5	62.7	44.3	25.53
1883-84	54.3	64.4	44.3	28.91
1884-85	55.5	65.1	46.0	16.77
1885-86	55.5	63.8	47.3	27.74
1886-87	54.6	64.1	45.2	18.95
1887-88	54.9	64.2	45.6	17.08
Averages for eleven years	55.0	64.6	45.4	26.36

Napa Weather for 1888.

MONTH.	Highest Temperature	Lowest Temperature	Mean Daily Range	Prevailing Direction of Wind	Clear Days	Fair Days	Cloudy Days
January	57	23	10.2	N.	2	12	17
February	73	34	15.3	S.	16	11	2
March	70	33	16.3	S.	16	11	5
April	79	37	22.5	S.	19	11	0
May	79	41	17.2	S.W.	9	21	1
June	84	46	20.8	S.	16	10	4
July	91	46	22.0	S.	19	11	1
August	90	51	22.7	S.	20	11	0
September	90	49	21.1	S.	18	9	3
October	81	42	21.2	S.	16	15	0
November	70	34	14.3	S.	12	8	10
December	59	35	10.1	N.	6	16	9

Average temperature, highest and lowest temperature, rainfall, clear days, etc., for January, February, and March, 1889, by W. H. Martin, druggist, Napa City:

MONTH.	Mean Temperature	Mean Max. Temperature	Mean Min. Temperature	Max. Temperature	Min. Temperature	Mean Range of Temperature	Total Precipitation—In.	Prev. Winds	Clear Days	Fair Days	Cloudy Days
January	41.6	48.9	34.3	56	30	14.5	1.02	N.	21	6	4
February	46.4	55.3	37.4	66	27	17.8	.76	N.&S.	13	13	2
March	53.2	60.8	45.5	74	38	15.3	8.38	N.&S.	9	12	10

Rainy days for each month in the year, along with the yearly totals and the monthly and yearly averages, from November, 1876, to date, by W. H. Martin, druggist, Napa City:

YEAR.	January	February	March	April	May	June	July	August	September	October	November	December	Total for Year
1876													
1877	11	7	6	6	3	1	2	0	0	4	1	0	56
1878	18	21	12	5	2	0	0	1	3	2	5	7	72
1879	10	9	15	2	1	0	0	0	0	0	9	14	75
1880	7	9	8	17	3	0	0	0	0	0	1	18	63
1881	9	9	5	6	2	2	0	0	2	3	3	13	54
1882	9	10	11	7	1	1	0	0	2	6	7	6	60
1883	2	5	4	4	8	1	0	0	2	6	3	5	40
1884	9	10	16	11	4	7	0	1	3	0	0	11	74
1885	7	2	3	5	1	1	1	0	2	1	18	8	49
1886	9	1	8	11	2	0	0	0	0	6	2	7	46
1887	7	16	4	8	1	1	1	0	1	0	4	10	53
1888	14	6	7	1	3	5	1	0	2	0	10	15	64
1889	4	4	14										
Monthly averages...	8.9	8.3	8.7	7.4	3	1.4	0.4	0.2	1.3	2.8	5.3	9.1	58.4

DAILY NORMAL TEMPERATURE AT SAN FRANCISCO.

The following table of normal temperatures for each day of each month, at San Francisco, as deduced from three daily observations for fifteen years, was furnished by Nelson Gorom, Observer in charge of the San Francisco local Signal Office:

DATE.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	50.3	52.2	54.4	55.1	56.4	57.9	58.5	59.1	59.8	59.4	57.3	54.7
2	50.7	52.7	54.6	54.7	56.8	57.7	58.4	59.2	60.6	59.2	56.0	53.1
3	50.0	52.4	54.0	54.4	55.6	58.0	58.3	58.3	60.0	60.2	55.9	52.7
4	50.3	52.3	52.7	54.6	55.6	58.9	58.9	58.6	59.9	58.9	57.1	53.6
5	52.3	51.0	54.0	53.5	55.5	60.2	58.4	58.8	59.0	59.0	57.0	54.0
6	51.0	50.6	53.4	53.1	56.0	60.0	58.0	58.9	58.3	59.9	57.7	53.2
7	51.7	50.6	52.9	53.9	57.1	58.7	58.4	58.3	58.6	61.1	58.3	52.6
8	51.3	51.4	52.7	54.9	56.2	58.9	59.0	58.4	58.7	60.5	57.8	51.4
9	50.5	51.5	52.9	54.6	55.3	58.9	58.9	58.6	58.9	59.2	57.7	50.8
10	50.3	51.1	53.1	53.9	55.4	59.1	58.8	58.7	59.8	59.9	56.1	50.9
11	49.3	50.7	53.7	54.0	55.4	60.0	58.9	57.9	60.3	60.0	56.1	50.5
12	48.5	51.0	53.6	53.8	54.7	60.0	59.4	57.8	60.4	58.9	55.4	50.3
13	49.2	51.6	52.5	53.1	54.7	58.7	58.9	58.1	60.7	57.3	55.4	51.0
14	50.7	51.1	52.7	54.3	54.8	57.4	58.7	58.5	61.0	57.9	56.3	51.7
15	50.2	51.8	52.9	54.7	55.1	57.7	58.8	58.2	60.0	58.9	55.9	51.6
16	51.0	52.0	52.6	53.8	55.7	57.8	58.7	57.6	59.9	59.5	56.0	51.0
17	50.4	51.7	52.8	53.9	55.6	57.9	58.2	58.2	59.6	61.4	55.5	50.2
18	50.3	50.9	54.5	53.6	56.5	58.6	57.6	58.5	58.9	61.3	54.8	51.2
19	51.2	51.6	54.2	54.0	56.7	59.2	57.6	57.8	59.7	59.9	54.1	52.3
20	49.9	53.0	54.1	53.9	56.1	59.6	57.8	57.3	60.8	58.9	55.1	52.3
21	50.0	53.6	53.9	55.2	56.4	57.7	57.6	57.9	61.7	59.4	55.7	51.9
22	51.3	53.8	54.6	55.8	56.3	58.2	57.7	58.1	60.3	59.2	56.1	51.9
23	51.1	53.8	54.0	56.5	57.3	58.1	57.7	58.2	59.8	58.8	55.7	52.4
24	50.8	52.4	54.6	56.1	58.0	56.9	57.9	59.2	59.6	58.2	55.0	53.3
25	50.9	52.7	54.5	54.4	58.7	57.2	57.9	58.8	61.2	58.5	53.5	52.7
26	50.3	53.3	55.5	54.4	58.0	58.6	58.8	59.2	58.8	59.7	53.4	51.5
27	50.5	52.9	55.6	54.9	57.9	57.0	58.7	59.6	59.0	58.8	54.2	51.5
28	50.6	52.6	54.5	55.8	57.1	57.6	58.6	59.1	60.0	58.0	54.4	51.5
29	51.5	51.5	54.7	55.2	57.4	58.2	58.8	59.6	59.9	57.7	55.6	50.1
30	51.4	-----	53.9	55.7	58.5	58.1	58.6	60.5	58.9	57.2	55.0	49.9
31	51.5	-----	54.6	-----	58.7	-----	59.5	59.3	-----	57.6	-----	49.7
Monthly ...	50.6	52.0	53.8	54.5	56.4	58.4	58.5	58.6	59.8	59.2	55.8	51.8

Rainfall at San Francisco.—The rainfall from 1849 to 1875, in the following table, was taken from the report of the State Agricultural Society for 1874, and was furnished to that society by Thomas Tennent.

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for Year.	Season of.	Total for Season.
1849	8.34	1.77	4.53	.46	none	none	none	none	none	3.14	8.66	6.20	17.40	1849-50	33.10
1850	.72	.54	1.94	1.23	.67	none	none	none	.33	none	.92	1.05	7.10	1850-51	7.40
1851	.58	.14	6.68	.26	.32	none	none	none	1.03	.21	2.12	7.10	15.56	1851-52	18.44
1852	3.92	1.42	4.86	5.37	.35	none	none	none	.46	.80	5.31	13.20	27.29	1852-53	35.23
1853	3.88	8.04	3.51	3.12	.02	.08	none	.01	.15	2.41	.34	.81	21.14	1853-54	23.87
1854	3.67	4.77	4.64	5.00	1.88	none	none	none	none	none	.67	5.73	26.39	1854-55	23.68
1855	9.40	.50	1.30	2.94	.76	.03	.02	none	.07	.45	2.79	3.75	22.31	1855-56	21.66
1856	2.45	8.59	1.62	none	.02	.12	none	.16	none	.93	3.01	4.14	20.93	1856-57	19.88
1857	4.36	1.83	5.55	1.55	.34	.05	.05	.05	none	2.74	.63	6.14	23.46	1857-58	21.81
1858	1.28	6.32	3.02	.27	1.55	none	none	.02	.03	.05	7.98	1.57	21.39	1858-59	22.22
1859	1.64	1.60	3.99	3.14	2.86	.09	.21	none	none	.19	.58	6.16	20.46	1859-60	22.27
1860	2.47	3.72	4.08	.51	1.00	.08	none	none	.02	none	4.10	9.54	25.52	1860-61	19.00
1861	24.36	7.53	2.20	.73	.74	.05	none	none	none	.40	.15	2.35	38.51	1861-62	49.27
1862	3.63	3.19	2.06	1.04	.26	none	none	none	.03	none	2.55	1.80	14.56	1862-63	13.08
1863	1.83	none	1.52	1.57	.78	none	none	.21	.01	.13	6.08	8.91	21.64	1863-64	10.08
1864	5.14	1.34	.74	.94	.63	none	none	none	.24	.26	4.19	.58	14.06	1864-65	24.73
1865	10.88	2.12	3.04	.12	1.46	.04	none	none	.11	none	3.35	15.16	36.28	1865-66	22.93
1866	5.16	7.20	1.58	2.36	none	none	none	none	.04	.20	3.41	10.69	30.64	1866-67	38.84
1867	9.50	6.13	6.30	2.31	.03	.23	none	none	none	.15	1.18	4.31	30.17	1867-68	34.92
1868	6.35	3.90	3.14	2.19	.08	.02	none	none	.12	1.29	1.19	4.31	22.59	1868-69	21.35
1869	3.89	4.78	2.00	1.53	.20	none	none	none	.03	none	.43	3.38	16.24	1869-70	19.31
1870	3.07	3.76	1.29	1.93	.21	none	none	none	.03	.11	3.72	16.74	30.86	1870-71	14.10
1871	4.22	6.97	1.64	1.10	.16	.02	none	none	.14	.21	2.62	7.25	24.33	1871-72	34.71
1872	2.17	4.24	.78	.52	.01	.08	.03	.15	none	.68	1.31	10.12	20.09	1872-73	18.02
1873	4.85	1.83	3.55	1.04	.34	.08	none	none	.83	2.73	5.92	.28	21.46	1873-74	23.98
1874	6.97	2.01	1.08	.02	.11	1.01	none	none	none	.24	7.27	4.15	23.54	1874-75	19.15
1875	7.55	4.92	5.49	1.29	.24	.94	.01	.01	.38	3.36	.25	none	23.54	1875-76	31.19
1876	4.32	1.18	1.08	.20	.18	.91	.02	none	none	.65	1.57	2.66	11.93	1876-77	11.04
1877	11.97	12.52	4.56	1.06	.16	.01	.01	none	.55	1.27	.57	.58	33.26	1877-78	35.18
1878	3.52	4.90	8.75	1.89	2.35	.05	.01	none	sprin.	.78	4.03	4.46	30.76	1878-79	24.44
1879	2.23	1.87	2.08	10.06	1.12	none	none	none	none	.05	.33	12.33	30.07	1879-80	26.66
1880	8.69	4.64	.90	2.00	.22	.69	none	none	.25	.54	1.94	3.85	23.72	1880-81	24.85
1881	1.68	2.96	3.45	1.22	.21	.04	none	none	.26	2.66	4.18	2.01	18.67	1881-82	16.14
1882	1.92	1.04	3.01	1.51	3.52	.01	none	none	.42	1.48	1.60	.92	15.43	1882-83	20.12

1884	-----	3.94	6.65	8.24	6.33	.23	2.57	sprin.	.04	.33	2.55	.26	7.68	38.82	1883-84	32.38
1885	-----	2.53	.30	1.01	3.17	.04	.19	.06	sprin.	.11	.72	11.78	4.99	24.90	1884-85	13.10
1886	-----	7.42	.24	2.07	5.28	.37	.01	.23	sprin.	.01	1.48	.84	2.07	20.02	1885-86	33.05
1887	-----	1.90	9.24	.84	2.30	.06	.07	sprin.	.01	.29	sprin.	.99	3.34	19.04	1886-87	19.04
1888	-----	6.81	.94	3.60	.11	.38	.27	.01	.01	.98	.13	3.99	5.80	23.03	1887-88	16.74
1889	-----	1.28	.72	7.78	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1888-89	* 20.70

* Up to April 1, 1889.

Thunder and lightning	2	0	4	0	1	1	1	0	0	2	4	2	3	2	1	1	9
Number of solar halos	---	---	---	---	1	11	2	2	46	66	72	76	88	67	49	46	56
Number of lunar halos	---	---	---	---	5	0	8	9	6	16	30	17	20	21	25	34	24
Number of light frosts	---	---	---	---	---	2	21	22	49	23	19	33	15	21	15	36	13
Number of killing frosts	---	---	---	---	---	---	---	---	---	6	22	15	11	0	8	4	7
Days maximum temperature above 90°	1	0	0	0	1	2	0	0	0	0	0	3	0	0	2	1	1
Days minimum temperature below 32°	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3

Barometer readings corrected for elevation and temperature.

General Weather Review for Oakland—From 1876 to 1888, inclusive, by Dr. J. B. Trembly.

Year:	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.
Mean temperature of the year -----	55.09	56.29	55.28	55.11	53.69	55.62	54.49	54.66	55.85	57.71	56.36	55.14	56.77
Mean temperature, warmest day -----	74.00	76.00	69.33	75.33	70.66	70.00	69.33	84.66	72.66	76.00	70.33	75.66	73.60
Mean temperature, coldest day -----	36.00	41.63	37.00	33.66	41.00	42.00	35.00	32.33	36.00	40.00	41.00	36.66	31.33
Maximum temperature for year -----	97.00	96.00	84.00	93.00	89.00	87.00	84.00	103.00	88.00	89.00	91.00	101.00	91.00
Minimum temperature for year -----	30.00	30.00	27.00	27.00	29.00	31.00	30.00	25.00	28.00	27.00	30.00	31.00	26.00
Greatest daily variation of temperature -----	33.00	38.00	33.00	46.00	36.00	35.00	31.00	38.00	30.00	36.00	39.00	33.00	35.00
Least daily variation of temperature -----	2.00	1.00	2.00	-----	1.00	1.00	1.00	1.00	1.00	00.00	1.00	1.00	1.00
Greatest monthly range of temperature -----	49.00	47.00	46.00	46.00	48.00	40.00	42.00	50.00	45.00	38.80	41.00	44.00	39.00
Least monthly range of temperature -----	19.00	25.00	23.00	30.00	28.00	21.00	19.00	29.00	19.00	19.00	27.00	20.00	22.00
Average daily range of temperature for year -----	14.94	14.61	13.65	12.96	14.10	13.40	12.80	12.81	11.64	11.44	13.16	13.49	11.10
Average monthly range of temperature for year -----	34.92	35.50	32.50	38.00	34.91	32.00	31.16	37.58	30.00	29.16	31.66	34.50	31.00
Yearly range of temperature -----	67.00	66.00	57.00	64.00	60.00	56.00	54.00	65.00	60.00	52.00	61.00	70.00	65.00
Mean relative humidity for year -----	83.00	83.11	84.71	85.29	83.70	83.25	82.57	83.71	85.39	86.74	87.15	88.53	85.83
Highest relative humidity for year -----	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Lowest relative humidity for year -----	40.00	34.40	38.60	39.00	27.00	29.00	28.70	33.90	38.19	41.50	26.70	41.50	56.70
Greatest variation humidity in twenty-four hours -----	49.69	51.20	45.06	58.00	54.40	37.40	65.70	48.80	41.00	43.80	46.50	51.00	45.20
Least variation humidity in twenty-four hours -----	06	.01	02	30	20	30	40	30	30	.80	1.50	.00	.00
Rainfall in inches during year -----	21.56	11.12	31.71	28.91	28.07	26.17	18.87	15.76	38.20	22.58	22.24	16.89	22.14
Rainfall in inches in agricultural years from July 1, 1877, to July 1, 1888. -----	28.55	12.36	32.33	23.55	23.84	31.34	18.13	20.22	31.10	17.95	32.21	18.45	17.10
Number clear and fair days during year -----	248	301	255	246	258	276	276	266	260	238	239	277	277
Number cloudy days during year -----	98	64	110	99	108	89	89	96	106	127	126	88	89
Number days in which rain fell -----	63	58	78	89	53	67	72	53	85	67	63	58	66
Number foggy mornings -----	23	8	17	19	27	15	15	21	19	20	21	18	37
Number mornings overcast -----	51	44	64	63	86	52	77	105	77	118	92	97	79
Number mornings frost was seen -----	35	35	36	46	62	47	50	58	38	27	55	49	28
Wind, direction from S.W. and W. -----	342	364	311	355	346	402	345	428	382	426	389	414	428
Wind, direction from N.W. and W. -----	210	150	173	150	136	136	150	119	128	112	112	159	96
Wind, direction from N.E. and N. -----	34	63	45	50	59	58	53	53	62	53	45	35	50
Wind, direction from S.E. and S. -----	163	150	163	126	172	138	143	91	151	142	158	129	164
Calms -----	340	368	402	372	385	331	404	438	375	362	391	358	350
Seasons.													
Mean temperature of spring -----	54.46	55.18	55.73	56.15	52.97	56.35	54.12	54.63	55.59	58.08	55.06	55.29	49.39
Mean temperature of summer -----	60.40	61.17	59.36	60.07	58.96	60.27	60.06	61.16	61.89	61.23	61.60	60.29	55.52

Mean temperature of autumn.....	57.75	57.67	56.92	56.73	55.86	54.78	56.44	54.25	57.07	59.52	56.89	56.85	62.29
Mean temperature of winter.....	48.20	50.39	50.12	47.60	45.38	51.10	46.80	46.20	47.38	51.69	52.12	49.80	59.30
Difference between the warmest and coldest months of spring.....	4.40	1.49	3.68	.70	9.91	5.12	5.77	5.00	6.16	2.04	8.05	2.39	5.07
Difference between the warmest and coldest months of summer.....	1.99	1.10	.35	1.26	1.88	1.55	1.13	2.78	2.00	3.25	2.00	2.03	1.49
Difference between the warmest and coldest months of autumn.....	6.13	7.76	5.93	9.14	7.70	8.79	9.68	10.64	3.99	5.05	8.94	7.63	6.39
Difference between the warmest and coldest months of winter.....	5.00	6.09	1.28	5.13	2.37	5.34	2.33	5.98	1.56	4.38	5.15	5.84	6.89
Difference between the warmest and coldest months of the year.....	16.20	12.25	13.06	15.68	15.78	12.38	14.77	19.26	16.38	13.33	14.43	14.87	17.71

Mean difference between the coldest and warmest months for thirteen years, 16.91°.

Mean temperature for thirteen years, 55.49°.

Mean barometer for thirteen years, 29.92.

Mean relative humidity for thirteen years, 84.54.

Mean annual rainfall for thirteen years, 23.66 inches.

Monthly Rainfall in Oakland for the Years 1873-1888.—By Mr. James Hutchison, of the Bay Nursery:

MONTH.	1873-74.		1874-75.		1875-76.		1876-77.		1877-78.		1878-79.		1879-80.		1880-81.	
	Quantity.	Days.	Quantity.	Days.	Quantity.	Days.	Quantity.	Days.	Quantity.	Days.	Quantity.	Days.	Quantity.	Days.	Quantity.	Days.
July.....							10	2	.18	2		2		2		
August.....							.15	5				3		2		
September.....	.60		2.24		.30		4.74	10	.45		.57	2		2		
October.....	.60		9.18		7.83		.25	2	1.62	8	1.85	2	.70	5	.05	
November.....	10.18		4.10		4.10				1.75	8	.65	3	2.98	9	.35	2
December.....	5.60		6.15		5.28		4.19	9	10.82	16	3.84	6	5.06	14	12.57	18
January.....	1.80		.30		4.87		1.42	5	11.63	17	5.65	9	1.71	7	10.48	11
February.....	5.25		1.65		4.55		1.42	7	4.30	16	7.96	15	2.19	9	3.95	14
March.....	1.25				.93		.22	5	1.18	6	1.17	12	8.46	18	1.40	3
April.....	.75		.10		.45		.33	5	.40	2	1.39	7	1.04	5	.50	6
May.....			1.64		.24			5			.16	1			1.16	2
June.....																
Amount.....	26.03		21.57		28.55		12.36	51	32.33	79	23.55	74	23.84	82	31.34	65
MONTH.	1881-82.		1882-83.		1883-84.		1884-85.		1885-86.		1886-87.		1887-88.		1888-89.	
	Quantity.	Days.	Quantity.	Days.	Quantity.	Days.	Quantity.	Days.	Quantity.	Days.	Quantity.	Days.	Quantity.	Days.	Quantity.	Days.
July.....									.02	2	.15	1	.01	2		
August.....	.40	1	.42	2	1.00		.25	1	.00	0	.00	0	.00	1		
September.....	.82	7	2.65	9	1.03		.35	3	.05	2	.05	1	.27	2	.92	
October.....	1.49	5	4.33	7	.90		2.80	4	.30	2	1.59	5	.00	0	.06	2
November.....	5.09	10	1.14	9	1.15		.05	3	11.11	17	.45	6	.78	4	3.52	9
December.....	2.42	9	1.95	3	3.81		7.73	13	4.33	8	3.40	6	3.22	8	4.82	13
January.....	2.05	10	.70	5	5.25		1.92	7	8.12	13	1.57	7	6.42	14	.90	7
February.....	4.20	11	3.53	8	8.59		.48	3	.30	4	7.83	16	1.02	4	.62	5
March.....	1.51	8	2.20	8	5.79		1.07	5	2.57	11	.71	6	4.44	8	7.60	13
April.....	.15	3	3.50	11	.55		3.12	9	5.11	11	2.35	5	.10	1	.93	10
May.....		2			3.03		.10	1	.30	5	.10	4	.38	5		
June.....							.08	6	.00	0	.05	2	.16	7		
Amount.....	18.13	63	20.22	64	31.10	78	17.95	54	32.21	75	18.45	59	17.10	56	19.37	62

Mean annual rainfall for fifteen years, 23.66 inches.

Highest and Lowest Temperatures at Salinas, Monterey County.—The following table of maximum and minimum temperatures for each month, at Salinas, was furnished by E. K. Abbott, M.D., and covers a period from May, 1872, to date:

YEAR.		JAN.		FEB.		MARCH.		APRIL.		MAY.		JUNE.		JULY.		AUGUST.		SEPT.		OCT.		NOV.		DEC.	
		Lowest Temperature ---		Lowest Temperature ---		Lowest Temperature ---		Lowest Temperature ---		Lowest Temperature ---		Lowest Temperature ---		Lowest Temperature ---		Lowest Temperature ---		Lowest Temperature ---		Lowest Temperature ---		Lowest Temperature ---		Lowest Temperature ---	
		Highest Temperature ---		Highest Temperature ---		Highest Temperature ---		Highest Temperature ---		Highest Temperature ---		Highest Temperature ---		Highest Temperature ---		Highest Temperature ---		Highest Temperature ---		Highest Temperature ---		Highest Temperature ---		Highest Temperature ---	
1872	76	36	30	84	36	47	90	54	71	56	79	52	47	87	36	82	84	32	80	46	87	30	32	80	46
1873	66	31	60	84	33	45	82	50	78	53	76	52	46	85	30	84	35	33	48	85	29	33	35	66	85
1874	66	28	71	84	33	48	77	49	77	52	76	51	51	79	39	84	33	38	50	79	39	38	35	73	38
1875	62	30	69	84	33	44	79	40	76	54	75	52	51	76	42	81	35	35	51	76	42	35	35	76	42
1876	77	21	73	84	33	44	79	40	76	54	75	52	51	76	42	81	35	35	51	76	42	35	35	76	42
1877	67	30	63	84	33	44	79	40	76	54	75	52	51	76	42	81	35	35	51	76	42	35	35	76	42
1878	64	26	72	84	33	44	79	40	76	54	75	52	51	76	42	81	35	35	51	76	42	35	35	76	42
1879	70	25	64	84	33	44	79	40	76	54	75	52	51	76	42	81	35	35	51	76	42	35	35	76	42
1880	68	32	76	84	33	44	79	40	76	54	75	52	51	76	42	81	35	35	51	76	42	35	35	76	42
1881	65	22	66	84	33	44	79	40	76	54	75	52	51	76	42	81	35	35	51	76	42	35	35	76	42
1882	66	20	81	84	33	44	79	40	76	54	75	52	51	76	42	81	35	35	51	76	42	35	35	76	42
1883	65	30	76	84	33	44	79	40	76	54	75	52	51	76	42	81	35	35	51	76	42	35	35	76	42
1884	70	33	32	84	33	44	79	40	76	54	75	52	51	76	42	81	35	35	51	76	42	35	35	76	42
1885	68	29	33	84	33	44	79	40	76	54	75	52	51	76	42	81	35	35	51	76	42	35	35	76	42
1886	70	28	72	84	33	44	79	40	76	54	75	52	51	76	42	81	35	35	51	76	42	35	35	76	42
1887	70	28	72	84	33	44	79	40	76	54	75	52	51	76	42	81	35	35	51	76	42	35	35	76	42
1888	63	22	74	84	33	44	79	40	76	54	75	52	51	76	42	81	35	35	51	76	42	35	35	76	42
1889	64	28																							
Highest and lowest temperatures in sixteen and seventeen years		77	20	81	24	84	30	82	33	90	44	40	44	86	43	87	51	96	44	92	30	84	28	80	20

Rainfall at Salinas, Monterey County.—The rainfall of Salinas, Monterey County, was furnished by Dr. E. K. Abbott, and extends from July, 1872, to date, showing the rainfall by months, years, and seasons; also the averages:

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for Year.	Season of.	Inches.
1872							none	none	.01	.02	.02	6.80	---	1872-73	13.45
1873	3.40	2.40	.80	none	none	none	none	none	.10	.10	.20	4.25	11.25	1873-74	11.17
1874	3.42	none	2.15	.95	none	none	none	none	none	1.83	1.42	none	9.77	1874-75	8.59
1875	4.50	.15	.69	none	none	none	none	none	none	none	5.17	2.18	12.63	1875-76	21.59
1876	6.16	3.55	4.52	none	.01	none	.10	none	.05	1.04	.05	none	15.48	1876-77	4.74
1877	2.54	.16	.30	.10	.40	none	none	none	none	.12	1.00	2.39	7.01	1877-78	23.82
1878	7.05	8.77	2.37	1.32	none	none	none	none	.05	.60	.20	.35	21.51	1878-79	10.94
1879	2.42	2.81	1.85	1.69	.82	.15	none	none	none	1.05	1.08	2.28	14.15	1879-80	13.22
1880	1.65	1.16	1.64	3.90	.46	none	none	none	none	none	.57	5.56	14.94	1880-81	14.07
1881	3.32	2.32	1.26	.66	none	.38	none	none	.10	.28	.67	1.24	10.23	1881-82	12.93
1882	1.78	2.31	4.86	1.01	.49	.19	none	none	.38	1.43	.65	1.95	15.05	1882-83	11.79
1883	.91	.95	2.26	1.28	1.98	none	none	none	.19	1.19	.25	.90	9.91	1883-84	20.25
1884	1.71	4.49	5.09	3.65	.72	2.66	none	.18	.11	1.79	.28	4.46	24.54	1884-85	9.48
1885	1.09	.05	.19	1.21	.12	none	none	none	.02	.08	6.60	1.30	10.66	1885-86	20.76
1886	5.10	1.47	2.16	3.83	.20	none	none	none	none	.62	.82	.72	14.92	1886-87	9.88
1887	.75	4.73	.54	1.63	.07	none	none	none	.71	none	.98	2.16	11.57	1887-88	13.10
1888	4.15	.53	3.28	none	.89	none	none	none	.56	none	1.64	2.20	13.25	1888-89	*6.69
1889*	.64	1.65													
Totals	50.59	37.50	34.16	21.23	6.16	3.38	.10	.18	2.28	10.15	21.60	38.74	216.93		219.78
Averages	2.976	2.206	2.135	1.327	.385	.211	.006	.011	.134	.597	1.271	2.279	12.700		12.928

* Up to March 1, 1889.

WEATHER AT LODI, SAN JOAQUIN COUNTY.

The following table, compiled from observations taken by Ezra Fisk, three miles south of Lodi, shows the mean temperature of San Joaquin County at sunrise, at 2 P. M., and at sunset, for every month for seven consecutive years, including 1882, 1883, 1884, 1885, 1886, 1887, 1888, and January and February, 1889. Very few localities on the coast possess so equable and moderate a climate as these figures indicate:

MONTH.	At Sunrise.	At 2 P. M.	At Sunset.	Mean.
1882—January	34.54	53.19	47.73	45.15
February	34.67	54.85	49.39	46.30
March	41.19	63.28	55.74	53.40
April	42.62	67.53	56.80	55.65
May	48.71	79.80	65.58	64.69
June	51.13	83.06	68.10	67.43
July	55.45	90.19	70.41	72.05
August	52.29	89.38	77.10	72.92
September	51.33	83.36	74.00	69.56
October	46.45	68.25	66.06	60.25
November	37.50	58.13	52.96	49.53
December	36.48	57.00	52.09	48.52
Yearly mean				58.78
1883—January	34.10	49.32	45.32	42.91
February	32.78	57.03	50.50	46.77
March	42.12	69.93	60.48	57.51
April	41.60	67.56	57.03	55.39
May	49.48	74.16	62.35	61.99
June	53.93	89.03	72.93	71.85
July	55.45	89.61	75.42	73.49
August	52.25	81.87	75.83	69.98
September	53.60	87.30	77.70	72.86
October	44.54	69.61	63.64	59.26
November	36.90	60.46	56.60	51.32
December	36.80	52.67	48.77	46.08
Yearly mean				59.11
1884—January	35.80	55.09	49.93	46.94
February	37.99	55.43	51.13	48.18
March	43.83	61.77	55.12	53.73
April	45.66	67.10	58.16	56.97
May	50.64	76.71	63.93	63.76
June	54.00	76.83	64.63	65.15
July	52.93	86.19	73.48	70.86
August	54.73	87.96	75.93	72.87
September	48.30	78.96	69.86	65.70
October	45.35	75.83	65.61	62.26
November	39.63	67.63	61.10	56.08
December	38.64	56.16	51.74	48.84
Yearly mean				59.27

TRANSACTIONS OF THE
WEATHER AT LODI—Continued.

MONTH.	At Sunrise.	At 2 P. M.	At Sunset.	Mean.
1885—January	40.54	54.00	49.35	47.96
February	40.57	64.75	57.39	54.23
March	43.32	73.45	62.77	59.84
April	47.50	74.26	61.93	61.23
May	48.86	81.25	66.32	65.44
June	49.53	81.26	65.93	65.57
July	54.77	86.29	72.35	71.13
August	56.38	90.93	78.67	75.32
September	52.93	86.60	77.03	72.18
October	48.32	78.61	70.90	65.94
November	48.10	62.00	57.80	55.30
December	43.64	55.09	51.06	49.94
Yearly mean				62.00
1886—January	40.80	53.06	49.10	47.65
February	43.28	63.35	56.21	54.28
March	39.48	62.96	54.45	53.29
April	46.23	67.90	58.01	57.38
May	47.80	78.61	64.19	63.53
June	53.56	87.00	71.90	70.82
July	56.29	89.64	76.74	74.22
August	56.35	90.83	77.41	74.86
September	50.40	85.40	74.60	70.13
October	42.80	71.90	64.19	59.63
November	35.70	62.30	56.76	51.58
December	40.80	59.06	53.38	51.08
Yearly mean				60.70
1887—January	36.83	57.71	51.90	48.81
February	36.85	52.71	47.64	45.73
March	41.51	71.64	61.87	58.34
April	43.83	70.90	59.50	58.07
May	47.64	78.93	64.74	63.77
June	52.40	79.66	69.70	67.25
July	52.83	89.80	73.43	72.02
August	53.19	88.03	75.22	72.14
September	53.60	86.73	76.13	72.15
October	47.58	82.00	72.71	67.43
November	38.10	67.66	60.23	55.33
December	36.58	54.52	47.96	46.35
Yearly mean				60.61
1888—January	37.19	50.45	45.06	44.23
February	39.41	62.17	55.62	52.40
March	41.29	65.67	56.09	54.35
April	45.80	77.96	64.50	62.75
May	49.45	80.71	62.67	64.67
June	56.56	82.43	69.43	69.47
July	56.51	92.58	75.09	74.72
August	57.16	90.22	80.09	75.82
September	59.40	89.06	77.83	75.43
October	50.32	78.96	69.71	66.33
November	44.23	63.76	58.76	55.58
December	45.96	54.83	50.51	50.43
Yearly mean				62.13
1889—January	34.80	53.87	48.13	45.60
February	36.64	61.71	53.57	50.64

Rainfall at Lodi, San Joaquin County—J. D. Huffman, Observer.

MONTH.	1887.	1888.	1889.
January	-----	5.09	.35
February	-----	.44	.65
March	-----	2.59	-----
April	-----	.11	-----
May	-----	.61	-----
June	-----	.43	-----
July	-----	none	-----
August	-----	none	-----
September	-----	.88	-----
October	none	none	-----
November	.77	3.61	-----
December	4.54	3.56	-----

Total for season of 1887-8, 14.58; 1888-9 (up to March 1, 1889), 9.05.

METEOROLOGICAL RECORD OF FRESNO, CALIFORNIA.

By J. R. WILLIAMS, Observer Signal Corps.

The following shows the annual meteorological summary of Fresno, California, latitude 36° 43', longitude 119° 49', for the year ending December 31, 1888. Very much that is of interest, and instructive as well, can be gleaned from these statistics. The maximum, minimum, and mean temperature, when compared with other sections of the State, show the climate of Fresno to be, what is claimed for it, dry, warm, and comparatively equable. There is very much more that could be said, but each person will readily find those points in which he is most directly interested:

Mean Barometer Readings.

MONTH.	Monthly Mean.	Highest Observed.	Date.	Lowest Observed.	Date.	Absolute Range.
January	29.800	30.25	17	29.26	4	0.99
February	29.742	29.96	19	29.46	27	0.50
March	29.688	30.11	11	29.26	8	0.85
April	29.680	29.89	6	29.40	16	0.49
May	29.565	29.75	8	29.39	11	0.36
June	29.558	29.75	30	29.34	16	0.41
July	29.561	29.86	12	29.42	16	0.44
August	29.508	29.71	2	29.30	11	0.41
September	29.510	29.72	30	29.25	11	0.47
October	29.598	29.79	22	29.40	5	0.39
November	29.685	29.86	6	29.39	23	0.47
December	29.744	29.97	2	29.20	22	0.79
Annual means	29.637	-----	-----	-----	-----	-----

Elevation of surface of mercury in barometer cistern above mean sea-level on December 13, 313 feet.

Mean Temperature from Self-Regulating Instruments.

MONTH.	Monthly Mean.	Maximum.	Date.	Minimum.	Date.	Absolute Range.	Mean Maximum.	Mean Minimum.
January	44.1	68.5	26	19.6	16	48.9	53.0	35.2
February	53.2	83.0	26	29.6	29	53.4	65.5	40.4
March	54.1	77.1	21	28.1	1	49.0	65.5	41.6
April	67.1	97.5	14	40.9	6	56.6	81.9	50.3
May	68.6	96.2	12	46.1	23	50.0	82.6	53.4
June	74.1	103.5	22	50.5	7	53.0	88.2	58.5
July	80.6	109.2	16	53.5	12	55.7	99.5	63.9
August	82.9	111.1	24	56.1	1	55.0	101.5	64.6
September	80.3	110.9	11	54.5	29	56.4	97.6	63.8
October	66.2	93.5	11	41.0	25	52.5	82.3	50.7
November	53.7	78.0	2	34.8	13	43.2	64.6	44.0
December	47.9	65.9	16	34.6	3	31.3	54.2	42.4
Annual means..	64.4						78.0	50.7

MONTH.	Mean Dew Point.	Mean Relative Humidity.	Mean Cloudiness.	Total Amount of Precipitation.
January	38.3	81.2	4.2	1.75
February	44.3	74.2	2.0	0.13
March	45.3	74.6	3.1	1.95
April	49.4	56.6	1.8	0.22
May	51.3	57.9	2.3	0.56
June	53.4	51.8	1.5	trace.
July	54.1	45.4	1.2	trace.
August	52.6	40.8	0.8	trace.
September	56.4	49.0	1.2	0.06
October	49.3	59.0	0.7	0.00
November	46.3	78.8	3.2	2.38
December	45.8	93.0	7.3	1.71
Annual means.....	48.8	60.2	2.4	8.76

Elevation of thermometer bulbs above ground on December 31, 46 feet.

Velocity and Direction of Wind.

MONTH.	Total Miles.	Miles per hr.	Direction.	Date.	Prevailing Direction.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	sum.
January	2,887	18	N.	14	E.	8	6	19	7	18	4	12	12	7
February	2,674	18	N.W.	18	N.	21	3	11	8	17	3	5	15	4
March	3,590	24	S.E.	1	N.W.	18	4	6	17	11	2	9	19	7
April	3,857	20	N.W.	25	N.W.	27	0	6	4	4	0	12	36	1
May	4,501	20	N.W.	31	N.W.	12	1	2	1	3	7	27	40	0
June	5,767	18	N.W.	3	N.W.	12	0	0	1	3	1	11	61	1
July	4,425	20	N.W.	31	N.W.	19	0	3	1	6	1	7	25	0
August	3,996	18	N.W.	12	N.W.	15	0	0	1	3	3	9	31	0
September	3,564	24	N.W.	15	N.W.	10	2	3	4	1	3	7	30	0
October	2,976	15	N.	6	N.W.	16	1	5	5	3	1	3	24	4
November	2,248	18		16	N.W.	7	4	7	11	6	4	4	12	5
December	2,076	15	E.	22	S.E.	5	3	8	10	9	7	10	6	2
Annual Means.	42,504				N.W.	170	24	70	70	84	36	116	311	31

The following table shows the clear, fair, cloudy, foggy, and rainy days, minimum temperature below 32° and maximum above 90°, with number of thunder storms for each month of the year 1888, at Fresno:

MONTH.	Clear Days-----	Fair Days-----	Cloudy Days-----	Foggy Days-----	.01 Inch or More--	Minimum Temper- ature below 32°--	Maximum Temper- ature above 90°--	Thunder Storms---
January-----	13	11	7	0	6	12	0	0
February-----	21	8	0	0	1	1	0	0
March-----	18	10	3	0	8	1	0	0
April-----	23	7	0	0	2	0	8	0
May-----	21	9	1	0	5	0	6	1
June-----	21	9	0	0	0	0	12	0
July-----	27	2	2	0	0	0	28	0
August-----	30	0	1	0	0	0	30	0
September-----	23	6	1	0	1	0	24	1
October-----	27	4	0	0	0	0	3	0
November-----	14	6	10	2	7	0	0	1
December-----	3	9	18	8	6	0	0	0
Totals-----	241	81	43	10	36	14	111	3

The rainfall for the past seven years has been as follows at Fresno:

1882-----	6.70
1883-----	7.64
1884-----	15.98
1885-----	7.10
1886-----	19.42
1887-----	8.40
1888-----	6.48
Average-----	10.24

TABLE SHOWING THE AVERAGE TEMPERATURE AND RAINFALL FOR THE SAN JOAQUIN VALLEY COUNTIES.

The following named counties are represented in this table: San Joaquin, Merced, Fresno, Tulare, and Kern. The lowest temperature below 20° was recorded in the following named counties: Fresno, Tulare, and Kern. The lowest being for each county named above, as follows: 15°, 10°, 16°, respectively. Taking elevation in consideration, the southern end of the San Joaquin Valley is much colder than any portion of the Sacramento Valley. For instance, Auburn, in Placer County, Sacramento Valley, at an elevation of 1,363 feet, has a minimum record of but 18°, while Delano, only 319 feet, has a minimum record of 16°, or two (2) below Auburn. This table will convince the wayfarer, though a stranger, that he must come north to the Sacramento Valley to find a more equable climate, unless he decides to cross into Santa Barbara or Los Angeles Counties and winter there; even then the great Sacramento Valley will compare favorably with those counties in a great many respects. The mean annual temperature of Los Angeles and Santa Barbara is the same as Sacramento, but the average winter temperature of the two former places is much milder than that of Sacramento City:

STATIONS AND COUNTIES.	Elevation—Feet	Average Winter Temperature	Average Spring Temperature	Average Summer Temperature	Average Autumn Temperature	Average Annual Temperature	Highest Temperature	Lowest Temperature	Average Seasonal Rainfall—Inches
<i>San Joaquin County:</i>									
Stockton	20	48.1	59.7	72.3	61.7	60.5	110	20	13.54
Lathrop	25	46.3	59.4	72.1	60.6	59.6	106	20	11.98
Tracy or Ellis	76	48.8	62.3	77.6	64.6	63.3	112	20	9.10
Farmington	111	46.2	60.2	75.6	62.6	61.2	114	20	15.57
<i>Merced County:</i>									
Merced	171	49.2	61.2	78.4	64.5	63.3	112	20	11.09
<i>Fresno County:</i>									
Borden	274	48.4	61.5	82.2	67.1	64.8	118	15	9.27
Fresno	295	50.2	64.9	84.1	67.6	66.7	115	18	9.57
Kingsburgh	301	49.0	62.5	82.6	66.2	65.1	112	10	9.36
<i>Tulare County:</i>									
Goshen	286	49.1	63.6	82.1	67.5	65.6	116	14	7.76
Tulare	289	46.6	62.8	83.4	65.1	64.5	116	14	6.89
Visalia	335	45.4	59.4	80.8	60.3	61.5	109	18	9.39
Tuohy's Ranch, Lewis Valley	440	47.1	62.5	79.4	62.3	62.8	106	22	11.15
Lemoore	227	46.1	62.0	81.3	63.8	63.3	111	18	9.82
<i>Kern County:</i>									
Delano	319	50.4	64.7	83.8	68.0	66.7	118	16	6.34
Sumner	422	49.6	65.0	85.1	65.5	66.3	113	18	5.02
Caliente	1,290	51.8	63.0	82.8	66.3	66.0	112	23	10.98
Keene	2,705	44.6	55.0	73.6	59.4	58.2	108	9	13.28
Teahachapi	3,964	39.1	51.8	72.6	54.8	54.6	102	zero.	11.04
Mojave	2,751	47.4	59.6	82.1	66.2	63.8	114	12	4.94

CLIMATE OF SAN LUIS OBISPO COUNTY.

By Signal Service Observer, MR. J. E. LEWIS.

With persons who are thinking of emigrating to any particular section, the question of climate is always one of prime consideration. If a man lives in a malarial section, or one subject to the ravages of fever or consumption, it is a duty which he owes to himself and family to remove, provided he possesses the means, to a place where these baneful conditions do not exist. Many portions of the Eastern States are cursed with just such disease-producing climatic conditions. San Luis Obispo County, on the contrary, is free from any of the causes that produce the unfavorable conditions in many of the Eastern States. It is well known that a wide difference in temperature exists in corresponding latitudes on the Atlantic coasts of the United States and of Europe, and the cause has been well established. While along the eastern shores of our own country courses the Arctic Ocean current, bearing down from the Northern Sea its icy waters, the western countries of Europe are warmed by the mighty Gulf stream, which bears to their shores the thermal waters of the tropical ocean. Equally fortunate with the western shore of Europe, California along its whole length of nearly eight hundred miles luxuriates in the balmy breezes of the great Japan current—that mighty stream of warm water, which perennially washes directly against the western shores of America. The temperature of the winds blowing over it is of course affected by its heat, and they carry modifying influences inland, and as a consequence during the greater portion of the year, San Luis Obispo County enjoys the balmy healthfulness of the breezes, that blowing fresh from the broad bosom of the Pacific, are moderated and softened by its

warm stream, and yet being from the mighty expanse of the ocean are pure, and not contaminated, as is too often the case with the warm winds of less favored regions.

But it must not be supposed that every portion of California is equally fortunate, for strictly speaking there is no such thing as a climate of the State. Within its borders may be found every variety of climate that exists in the United States, from Maine or Minnesota, to Florida or South Carolina. "The winters of the Sierras are severe enough to satisfy the most enthusiastic admirer of the rigors of a northern winter; the summer heat of some of the southern and interior counties is torrid enough to make a visitor from the tropics feel quite at home, while the summer and autumn fogs of San Francisco could be best appreciated by a native of Labrador, or a Massachusetts fisherman who has spent years on the banks of Newfoundland." Many people are under the impression that if they but come to California they cannot fail to derive all the benefits of its "glorious" climate. As already shown, such cannot be the case; only in favored portions can be enjoyed that which has made the climate of California famous the world over. A necessary element to a proper estimate of the value of a home in California is the length of the productive season. If three crops can be raised in one season on one piece of land it is worth three times as much as that on which one can be raised. Even more than that; the single crop has to be worked in the short season of growth; the triple crop is worked by one man in the same time or during the year, employing his whole time, whereas two thirds of the vital energy of the worker is lost in the contest with the unproductive cold weather. Here the gain of three years is condensed into one, without the loss of two years of life and the food and energy necessary to live through the unproductive and wasting period.

With these facts before our readers, we append various tables taken from the official records of this county showing the comparative and absolute rainfall, mean temperature, etc., that our readers may make their own estimates of what is claimed, and justly, for the favored county of San Luis Obispo.

Comparative Annual Rainfall.

Rainfall at San Luis Obispo, as compared with other points in California and the United States:

PLACE.	State.	Inches.	PLACE.	State.	Inches.
San Francisco.....	California.....	21.46	Bismarck.....	Dakota.....	21.27
San Luis Obispo*....	California.....	20.69	Dodge City.....	Kansas.....	20.09
Sacramento.....	California.....	19.25	North Platte.....	Nebraska.....	19.97
Santa Barbara.....	California.....	15.31	St. Vincent.....	Minnesota.....	18.62
Los Angeles.....	California.....	14.92	Lewiston.....	Idaho.....	17.14
Monterey.....	California.....	13.01	Salt Lake City.....	Utah.....	16.91
Salinas.....	California.....	12.03	Helena.....	Montana.....	15.13
Stockton.....	California.....	11.37	Denver.....	Colorado.....	14.98
San José.....	California.....	10.62	Prescott.....	Arizona.....	14.51
Chualar.....	California.....	10.18	Boise City.....	Idaho.....	13.30
San Diego.....	California.....	9.44	El Paso.....	Texas.....	12.11
Soledad.....	California.....	7.75	Cheyenne.....	Wyoming.....	10.85
Riverside.....	California.....	7.66	Phoenix.....	Arizona.....	7.53

* Average as taken at San Luis Obispo City for the last seventeen years.

Rainfall at San Luis Obispo during the past Seventeen Years.

YEAR.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Total.
1869-70.	-----	-----	.84	.66	.78	.71	4.85	.74	2.40	.85	-----	-----	11.83
1870-71.	-----	-----	.68	.38	2.90	1.51	4.43	-----	2.79	.28	-----	-----	12.97
1871-72.	-----	-----	-----	2.40	13.93	5.16	3.45	.71	1.37	-----	-----	-----	27.02
1872-73.	-----	-----	-----	-----	6.00	5.00	1.79	-----	-----	-----	-----	-----	12.79
1873-74.	-----	-----	-----	-----	7.96	4.29	4.04	3.23	1.00	-----	-----	-----	20.52
1874-75.	-----	-----	4.28	2.05	.48	12.10	.28	.50	-----	-----	-----	-----	19.69
1875-76.	-----	-----	-----	6.20	2.20	9.87	5.29	5.30	1.26	-----	-----	-----	30.12
1876-77.	-----	-----	1.16	-----	-----	4.83	.42	1.74	-----	-----	-----	-----	8.15
1877-78.	-----	-----	-----	1.42	3.90	7.88	11.91	2.74	2.75	-----	-----	-----	30.60
1878-79.	-----	-----	-----	1.50	2.58	1.78	2.15	1.60	1.80	.25	-----	-----	11.66
1879-80.	-----	-----	.75	1.40	3.03	1.75	7.23	2.36	8.78	.52	-----	-----	25.82
1880-81.	-----	-----	-----	.48	13.35	4.71	1.90	1.40	1.85	-----	-----	-----	23.69
1881-82.	-----	.40	1.65	.25	2.00	.85	3.40	6.75	1.73	-----	-----	-----	17.03
1882-83.	-----	-----	.69	2.95	.44	1.50	1.60	4.88	1.10	3.85	-----	-----	17.01
1883-84.	-----	-----	-----	-----	3.56	10.57	10.21	12.41	3.39	-----	2.26	-----	42.40
1884-85.	-----	-----	2.17	.13	8.85	2.25	-----	.94	3.15	.10	-----	-----	17.59
1885-86.	-----	-----	.04	12.90	3.67	5.78	.79	2.37	3.75	-----	-----	-----	29.30
1886-87.	-----	-----	.25	1.25	1.06	1.10	9.60	1.29	1.56	.36	.07	.02	16.56
1887-88.	-----	2.05	.25	1.40	3.15	7.02	.28	3.84	.14	.16	.04	-----	18.33
1888-89.	-----	-----	-----	4.48	3.36	1.40	2.08	7.51	.61	-----	-----	-----	*19.44

* Up to May 1, 1889.

The average precipitation for the last nineteen seasons is 20.69 inches.

Meteorological Report for 1888.

The following meteorological report for the year 1888 was compiled for the "Republic," by J. E. Lewis, Signal Service Agent at this city. The record is from January 1 to December 31, 1888:

Number of clear days, 221; number of cloudy days, 117; number of fair days, 28. Highest temperature, 96°; lowest temperature, 27°. Greatest velocity of wind, 32 miles per hour. Number of days in which .01 of an inch or more of rain fell, 42; amount of rain in year, 11.38 inches; amount for season of 1887-88, 18.33 inches. Highest barometer, 30.098; lowest barometer, 26.251.

The rainfall for the season was not as favorable for vegetation as its quantity would indicate, from the fact that heavy rains fell in September and October, 1887, which were of no benefit whatever. There were but very light rains after January.

During January the weather was colder than ever before recorded in this section, the record of lowest self-registering thermometer being 27°, and numerous outdoor water pipes were frozen and bursted, an unprecedented occurrence. The highest thermometer was 96°, in October.

Weather for January, 1889, at San Luis Obispo.

From the records of MR. J. E. LEWIS, Signal Service Observer.

Rainfall, 1.50 inches, making a total for the season of 8.34 inches. Rain fell on 4 days. There were 5 cloudy days, 5 partially cloudy, and 21 clear days. Frost is recorded on 4 mornings. Highest temperature, 70°, on the sixth; lowest, 35°, on the twentieth; lowest maximum, 55°, on the thirteenth; highest minimum, 50°, on the sixth and eleventh; average maximum temperature, 61.88°; average minimum temperature, 42.68°. Greatest velocity of wind, 20 miles an hour, on the fourth; 8 days calm; average velocity of wind in the morning, 3.84 miles per hour; average greatest velocity of wind in the evening, 7.32 miles per hour; heaviest wind from the south-

east; wind from northwest, parts of 18 days; from east, parts of 13 days; from north, parts of 7 days; from south and southeast, parts of 14 days. Highest barometer, 29.995, on the first; lowest barometer, 29.220, on the fourteenth. Elevation of point of observation, 366 feet above the level of the sea, and 206 feet above the level of the depot of the Pacific Coast Railway in the City of San Luis Obispo. Latitude, 35° 22' north, and longitude 120° 38' west. January is the coldest month of the year. The temperature at the hospital, where the Signal Service Station is located, shows less variation than the lower lands of the city, the difference being about 5° in extremes; the average being about the same. The rainfall is also slightly less.

Comparative Mean Temperature of Six Coldest Months at San Luis Obispo, California.

Temperature of six coldest months as compared with the most noted places in the world, regarding climate:

PLACE.	State.	Degrees Fahrenheit.
San Luis Obispo	California	56.15
Santa Barbara	California	56.55
City of Mexico	Mexico	56.03
City of Lisbon	Portugal	54.70
City of San Remo	Italy	53.80
City of Mentone	France	53.21
City of Nice	Italy	48.45

WEATHER REPORT.

The U. S. Signal Service established a station at San Luis Obispo, in July, 1885, and a fire occasioned its removal after March, 1886. The following table gives the observations for the eight months of its existence. The remaining four months are always uniformly fair and pleasant:

1885 AND 1886.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Total.
Days upon which rain fell*	0	0	0	17	5	13	3	9	47
Days upon which snow fell	0	0	0	0	0	0	0	0	0
Days upon which frost appeared†	0	0	0	0	3	0	0	0	3
Days upon which fog appeared‡	9	0	0	0	0	0	0	0	9
Days which were cloudy .....	.....	0	0	11	5	12	1	5	34
Days which were fair .....	.....	0	0	6	7	8	10	11	42
Days which were clear	31	31	31	13	19	11	17	15	167
Highest velocity of wind	15	28	32	44	36	34	28	42	.....
Mean temperature	62.0	63.2	63.0	56.7	55.7	52.7	58.4	50.4	57.8
Total number of days	31	30	31	30	31	31	28	31	243

*Rain usually falls during hours from sunset to sunrise.

†Fog and light frosts appear only late in the evening and early in the morning.

‡Miles per hour.

SANTA BARBARA, SANTA BARBARA COUNTY.

By Professor HUGH D. VAIL.

Table of temperature, rainfall, etc., at Santa Barbara, for the years 1885, 1886, 1887, and 1888:

MONTH.	Monthly Mean Temperature.	Mean of Warm- est Day.	Mean of Cold- est Day.	Highest Tem- perature.	Lowest Tem- perature.	Rainfall, Inches.
1885—January	53.2	57.0	49.5	60.0	39.0	1.23
February	56.7	65.5	51.5	81.0	41.0	0.07
March	59.1	62.5	56.0	79.0	45.0	0.35
April	60.7	70.5	54.0	80.0	44.5	3.00
May	60.0	64.6	54.0	75.0	44.0	0
June	62.4	64.5	58.5	83.0	45.0	0
July	66.1	73.0	62.5	89.0	50.0	0
August	68.0	76.0	61.5	92.0	52.0	0
September	66.8	78.8	62.5	103.5	51.5	0
October	62.9	72.0	58.5	89.5	47.0	0.19
November	58.9	64.8	50.0	77.5	40.0	9.84
December	57.2	65.7	52.0	81.5	40.0	2.47
Annual average	61.2	67.9	55.9	103.5	39.0	17.15
1886—January	55.0	73.5	47.5	85.0	35.0	5.12
February	59.6	70.0	45.0	85.0	39.0	1.19
March	53.1	59.5	46.2	71.0	36.0	2.03
April	55.7	61.5	50.5	74.0	41.0	3.40
May	60.5	65.5	54.0	80.5	44.0	0
June	62.0	67.5	58.3	80.0	48.0	0
July	66.3	72.0	63.5	84.5	52.5	0
August	68.2	72.0	63.2	85.0	54.0	0
September	63.8	68.3	57.0	79.0	43.0	0
October	58.3	62.5	51.7	79.0	42.0	0.39
November	56.3	66.5	49.8	83.0	37.5	0.87
December	55.8	65.8	49.5	81.5	40.0	0.86
Annual average	59.6	67.0	53.0	85.0	35.0	13.86

MONTH.	Monthly Mean Temperature	Mean of Warm- est Day	Mean of Coldest Day	Highest Temper- ature	Lowest Temper- ature	Rainfall, Inches.	Clear Days	Fair Days	Cloudy Days
1887—January	54.7	63.5	49.0	79.0	37.0	.31	-----	-----	-----
February	50.4	61.1	45.3	79.2	37.0	8.64	-----	-----	-----
March	57.0	64.8	52.0	82.6	43.0	.13	-----	-----	-----
April	58.4	66.8	51.0	80.5	41.0	1.43	-----	-----	-----
May	60.0	67.0	53.3	86.0	43.5	.33	-----	-----	-----
June	63.7	79.0	59.0	95.0	44.0	.03	-----	-----	-----
July	64.6	71.3	60.9	85.5	40.0	.00	29	0	2
August	64.8	69.7	62.0	81.0	53.0	.00	28	2	1
September	66.0	70.5	61.5	81.2	51.0	.38	24	4	1
October	65.0	74.0	59.3	91.8	48.5	.31	24	3	3
November	58.9	65.3	47.5	84.6	39.5	1.10	24	2	4
December	52.8	59.6	49.0	74.2	38.0	4.43	26	1	4
Annual average	59.7	67.7	54.2	95.0	37.0	*17.09	†155	†12	†15

*Total for year. †Total for six months.

The following is a summary of the thermometrical and other observations of the weather at Santa Barbara during the year 1888:

MONTH.	Mean Temperature of Month.	Mean of the Warmest Day.	Mean of the Coldest Day.	Rainfall, Inches.	Wind Movement, Miles.
January.....	49.0	58.7	41.0	10.15	-----
February.....	53.8	57.5	49.0	1.30	-----
March.....	53.0	60.5	46.0	3.86	2,703
April.....	59.9	75.0	53.0	0.16	2,977
May.....	57.6	64.5	51.7	0.02	2,971
June.....	64.4	69.0	59.5	-----	3,115
July.....	67.0	72.0	63.0	-----	3,292
August.....	66.3	72.0	63.5	-----	2,801
September.....	67.9	76.2	63.2	0.03	2,705
October.....	63.5	76.9	59.0	0.07	2,193
November.....	59.8	64.3	54.5	5.62	2,409
December.....	56.5	63.0	52.0	5.05	2,433

The mean temperature of the whole year was 59.9°, and that of three summer months 65.9°, a difference of only 6°. There were but 28 days during the year when the temperature rose above 80° in the warmest part of the day, and only 16 when it fell below 40° at night. On the warmest night in the year it fell to 62.5°, and there were only 8 nights when it did not fall as low as 60°. The number of clear days in the year were 251; fair ones, 34; cloudy, 81. Rain fell on 28 days (not counting those in which the rainfall was less than .1 of an inch), with a total rainfall of 26.26 inches. For the season of 1887-88 it was 21.73 inches. The rains were mostly at night. There were but 10 days during the year that could be called rainy. The mean relative humidity for the year was 77. The movement of the wind in the ten months of which the record was kept was 27,599 miles; the meaning of which will be best understood by comparing this with the movement in the corresponding ten months at some other well known places not supposed to be windy, as Philadelphia on the Atlantic Coast, and San Diego on the Pacific, which, according to the official "Weather Review," was 74,930 miles at the former, and 40,223 at the latter.

CLIMATIC COMPARISONS OF SANTA BARBARA WITH THAT OF SAN REMO AND MENTONE.

By Sergeant JAMES A. BARWICK, Observer Signal Corps, Sacramento, California.

Mentone and San Remo's climate, compared with Santa Barbara during each month of the year, shows that that of Santa Barbara is far superior as a summer and winter resort. The summers of San Remo and Mentone are as hot as those of the Sacramento and San Joaquin Valleys, and therefore cannot compare favorably with Santa Barbara, which has the finest and best summer temperature of any place on the Pacific Coast. The following temperature tables of Santa Barbara were compiled from Mr. Hugh D. Vail's records for 1885, 1886, and 1887, and is the average of these years. Those at Mentone are from M. de Brae's record of ten years. They are a valuable addition to tables already published for comparison with the California climate. Santa Barbara will be seen to far excel either San Remo or Mentone as a winter resort. Comparing Santa Barbara in summer, with the Italian climate, is simply a waste of words and space; for the table of comparison tells more plainly and more eloquently the great superiority of

the climate of Santa Barbara over the places mentioned. The table is as follows:

Santa Barbara, Mentone, and San Remo's Comparative Temperature Tables.

MONTH.	Mean Average Monthly Temperature at Santa Barbara.	Mean Average Monthly Temperature at Mentone, France.	Mean Average Monthly Temperature at San Remo, Italy.
January.....	54.3	48.2	47.2
February.....	55.6	48.5	50.2
March.....	56.4	52.0	52.0
April.....	58.3	57.2	57.0
May.....	60.2	63.0	62.9
June.....	62.6	70.0	69.2
July.....	65.7	75.0	74.3
August.....	67.0	75.0	73.8
September.....	65.6	69.0	70.6
October.....	62.1	64.0	61.8
November.....	58.0	54.0	53.3
December.....	55.3	49.0	49.3
Average for twelve months..	60.1	60.4	60.1

The lowest temperature ever recorded at Santa Barbara was 28.5°, during the cold wave of January, 1888; while an acknowledged minimum temperature in ten years at Mentone has been recorded as 32°. But Mr. Bennett in his book says: "In more severe winters I have repeatedly known the thermometer to descend below 32° several nights consecutively, near the seashore, and at the outlet of the torrent beds, especially in the western bay. Slight films of ice then form on shallow pools on the road and near the torrents."

This has occurred at Santa Barbara upon but one night, and not as at Mentone several nights consecutively. The above table is one of the strongest advocates for Santa Barbara as being the very best winter climate in the northern hemisphere from year to year and month to month. Dr. Bennett says of Mentone, speaking of the ten years' mean obtained by him from 1859 to 1869 for six months each year, and those obtained by M. de Brea's ten years' record from 1850 to 1860, that such results show how very uniform the climate of Mentone is, especially when a sufficiently large number of years are thus compared. Now, if Dr. Bennett thinks the climate of Mentone so very uniform, what would he think of the comparison as above with Santa Barbara; the latter's mean yearly temperature as deduced from ten years of observation by different parties, with observations at different hours, is 60.2°, while in the above table the mean for each month and the year are the average of the three years—that of 1885, 1886, and 1887, and are the same as that made by other parties. It ought to do a Californian good to look at each month of the above table, and see how much warmer the Santa Barbara climate is in the winter, spring, and fall, and how much cooler it is in the summer than the far famed and much advertised Mentone and San Remo. Santa Barbara had two hundred and fourteen clear days out of two hundred and eighty-nine that were observed during 1887 by Mr. Hugh D. Vail, from whose records the above facts are obtained. Mentone and San Remo have but an average of two hundred and fourteen clear days out of three hundred and sixty-five. This comparison speaks much, yes, very much indeed, for Santa Barbara—not only as a winter resort, but a summer resort as well. Mentone and San Remo have about as hot a summer temperature as does Riverside and the Sacramento and San Joaquin Valleys, and being much more moist than the California points

mentioned, would make an atmosphere of almost suffocation, like New York, Philadelphia, and other eastern cities.

COMPARATIVE LOS ANGELES WEATHER REPORT.

The following tabulated data and information in reference to the meteorological conditions of Los Angeles were compiled from the records of the United States Signal Service Office, by George E. Franklin, Observer in charge of the station, and comprises a period from the establishment of the station in July, 1877, to December, 1888, inclusive. The tabulated matter will be found to contain valuable and comprehensive data, and cannot fail to be of interest as showing the climatic advantages of this section. The temperature tables contain the highest, lowest, and mean temperatures; the number of days the temperature was above 90° and below 32°, in each month and each year, with averages for the period considered. An examination of these tables will show that there were but thirteen days on which the temperature rose to or exceeded 100°, and nine days on which it fell to 32° or below. The average number of days annually on which the temperature exceeds 90° is only fifteen. The highest recorded temperature was 108.5°, and the lowest 28°. A fact to be noted in considering these tables is that during the time of greatest heat the percentage of moisture in the atmosphere is low, and modifies the temperature so that the heat is neither oppressive nor prostrating, which is well illustrated by laborers continuing work during the hottest period.

Highest, Lowest, and Mean Temperature for each Month, and Monthly Averages for the Period Compiled, at Los Angeles.

YEAR.	JANUARY.			FEBRUARY.			MARCH.			APRIL.			MAY.			JUNE.		
	Highest..	Lowest..	Mean ---	Highest..	Lowest..	Mean ---	Highest..	Lowest..	Mean ---	Highest..	Lowest..	Mean ---	Highest..	Lowest..	Mean ---	Highest..	Lowest..	Mean ---
1877	72.0	37.0	54.9	71.0	41.0	55.0	76.0	41.0	56.0	80.0	41.5	57.8	89.0	47.0	62.2	81.0	47.0	55.0
1878	73.7	36.0	52.2	80.0	38.6	55.5	99.0	42.5	58.5	88.5	42.2	58.7	97.0	43.0	61.0	103.5	50.5	65.8
1879	76.0	30.0	51.3	70.5	33.5	50.1	73.5	36.0	51.1	83.0	40.0	55.9	97.0	42.0	61.1	83.0	50.0	63.4
1880	71.0	37.0	51.7	86.0	42.5	57.9	89.0	37.0	55.8	64.0	48.0	61.4	89.3	41.0	62.7	88.0	48.0	65.6
1881	74.2	32.0	49.4	76.7	22.0	50.3	87.8	35.3	55.3	80.0	40.2	56.4	86.1	42.1	61.7	87.1	49.6	64.4
1882	82.0	30.0	53.5	82.0	28.0	52.3	84.0	42.6	56.7	89.0	39.0	57.3	100.0	39.5	62.1	100.0	52.0	68.8
1883	78.0	33.7	53.9	81.0	38.5	55.1	72.5	37.0	54.8	80.0	41.5	57.2	79.0	47.0	61.6	98.0	49.5	65.6
1884	71.6	38.0	53.9	81.0	36.3	56.6	85.1	42.3	60.6	88.6	44.8	61.9	80.0	48.6	63.5	90.1	47.0	65.0
1885	75.3	32.0	54.7	81.0	41.1	59.5	76.0	37.2	54.3	80.0	42.3	57.2	89.0	44.2	62.4	91.6	48.2	66.1
1886	79.6	33.1	53.4	81.5	35.4	51.6	85.0	41.1	59.1	87.0	40.3	59.1	92.0	44.5	63.1	100.1	46.7	66.1
1887	71.0	30.9	50.0	73.5	39.2	54.4	79.0	35.9	55.1	99.0	44.0	61.9	83.0	45.0	60.8	94.0	50.5	67.5
1888	74.9	33.7	52.8	78.6	36.9	54.4	82.4	38.9	56.1	86.3	42.1	58.6	89.2	44.0	62.0	92.4	49.0	65.8
Averages	74.9	33.7	52.8	78.6	36.9	54.4	82.4	38.9	56.1	86.3	42.1	58.6	89.2	44.0	62.0	92.4	49.0	65.8

YEAR.	JULY.			AUGUST.			SEPTEMBER.			OCTOBER.			NOVEMBER.			DECEMBER.		
	Highest..	Lowest..	Mean ---	Highest..	Lowest..	Mean ---	Highest..	Lowest..	Mean ---	Highest..	Lowest..	Mean ---	Highest..	Lowest..	Mean ---	Highest..	Lowest..	Mean ---
1877	93.0	55.0	71.1	87.0	56.0	70.0	93.0	52.0	69.6	80.0	43.0	63.4	86.0	45.0	62.1	81.0	36.5	56.0
1878	88.0	52.0	67.7	89.0	54.0	68.7	103.0	50.0	65.6	91.0	43.0	63.1	81.0	37.0	58.3	88.2	30.0	54.4
1879	84.5	52.0	66.8	97.5	53.0	69.5	101.0	47.0	67.2	96.5	42.5	64.3	84.5	36.5	55.2	76.0	30.0	51.9
1880	85.0	52.0	64.2	87.0	52.0	66.4	91.0	44.0	64.5	89.0	44.0	62.0	85.0	35.0	55.5	80.0	38.0	55.6
1881	96.1	52.1	68.8	99.8	52.1	69.4	102.0	50.0	67.9	82.3	43.0	60.9	80.8	34.2	57.5	79.3	35.3	54.7
1882	98.1	52.3	69.8	98.9	57.0	71.0	100.0	46.0	67.6	88.0	44.0	63.0	81.0	36.0	57.3	82.0	35.0	56.4
1883	90.0	52.5	69.8	98.0	50.0	69.8	103.5	53.0	71.9	83.0	43.5	61.0	84.0	42.0	59.2	80.0	37.0	56.3
1884	99.0	51.5	70.2	101.5	52.5	71.3	92.5	46.5	65.5	89.1	42.9	62.3	88.0	38.7	59.6	75.6	35.5	52.3
1885	98.5	52.4	70.0	106.6	51.2	72.7	108.5	51.2	69.5	102.3	41.6	64.8	78.5	40.3	59.5	82.0	40.3	57.9
1886	98.1	50.4	69.7	98.1	53.7	71.8	91.3	48.3	65.6	82.2	41.1	59.3	84.9	34.1	56.6	84.8	37.3	55.7
1887	98.1	51.1	69.5	93.6	52.1	68.5	91.0	49.2	68.2	93.2	47.2	65.0	86.0	38.8	60.0	73.2	35.2	53.7
1888	95.0	49.0	67.9	97.0	51.3	67.6	98.2	55.0	68.4	98.0	44.0	61.9	83.8	40.0	57.2	78.8	41.0	55.2
Averages	93.6	51.9	68.6	96.6	53.2	69.7	98.6	49.3	67.6	89.6	43.3	62.6	83.6	38.1	58.2	80.1	35.9	55.0

Table Showing the Prevailing Direction of Wind, Average Daily Movement, and Highest Velocity, at Los Angeles.

YEAR.	JANUARY.			FEBRUARY.			MARCH.			APRIL.			MAY.			JUNE.		
	Direction.	Velocity.		Direction.	Velocity.		Direction.	Velocity.		Direction.	Velocity.		Direction.	Velocity.		Direction.	Velocity.	
		Average.	Max.		Average.	Max.		Average.	Max.		Average.	Max.		Average.	Max.		Average.	Max.
1877	N.	126.5	26	N.	141.0	25	N.	119.0	20	S.W.	114.3	25	S.W.	111.6	16	S.W.	105.3	15
1878	N.E.	133.4	29	N.E.	193.1	17	S.W.	103.7	22	S.W.	127.4	23	S.W.	135.4	21	W.	119.1	17
1879	N.	103.7	21	N.E.	127.6	26	N.E.	116.8	17	S.W.	135.8	23	S.W.	113.2	19	S.W.	106.2	14
1880	N.E.	105.1	17	N.E.	159.4	33	N.E.	136.2	46	W.	126.5	24	W.	139.6	19	W.	140.6	20
1881	N.E.	152.0	48	N.E.	139.2	30	W.	142.9	30	W.	92.9	30	W.	125.1	26	W.	137.5	18
1882	N.E.	178.2	34	N.E.	161.4	28	W.	124.3	22	W.	171.2	42	W.	157.1	24	W.	129.9	21
1883	N.E.	166.6	24	N.E.	189.1	40	N.E.	183.3	30	W.	150.4	24	W.	199.9	18	W.	128.4	20
1884	N.E.	136.3	26	N.E.	134.6	26	W.	114.9	20	W.	143.7	28	W.	102.9	23	W.	124.8	21
1885	N.E.	143.2	29	N.E.	143.2	29	W.	146.9	25	W.	150.9	28	W.	138.2	20	W.	126.2	17
1886	E.	168.6	37	N.E.	189.3	32	W.	123.3	18	W.	136.2	37	W.	151.8	30	W.	148.1	20
1887	N.E.	141.5	24	S.E.	189.3	32	W.	149.1	30	W.	138.5	28	W.	137.8	24	W.	136.1	19
1888	E.	142.1	33	W.	121.2	23	W.	149.1	30	W.	138.5	28	W.	137.8	24	W.	136.1	19

YEAR.	JULY.			AUGUST.			SEPTEMBER.			OCTOBER.			NOVEMBER.			DECEMBER.			ANNUAL.		
	Direction.	Velocity.		Direction.	Velocity.		Direction.	Velocity.		Direction.	Velocity.		Direction.	Velocity.		Direction.	Velocity.		Direction.	Velocity.	
		Av.	Max.		Av.	Max.		Av.	Max.		Av.	Max.		Av.	Max.		Av.	Max.		Av.	Max.
1877	W.	104.1	13	W.	93.9	16	W.	107.9	12	W.	111.1	24	N.	111.8	24	N.	119.5	24	W.	108.0	24
1878	W.	106.2	15	W.	98.4	15	W.	101.2	16	W.	92.5	14	N.	109.8	21	N.E.	126.0	23	N.&W.	112.6	26
1879	W.	105.3	14	W.	98.7	14	W.	92.3	15	N.E.	114.5	23	N.E.	101.7	24	N.E.	109.3	27	N.E.	111.2	29
1880	S.W.	108.9	22	S.W.	102.5	19	S.W.	78.2	16	W.	78.2	16	N.E.	63.9	17	N.E.	77.5	22	S.W.	102.0	26
1881	W.	136.8	19	W.	128.8	17	W.	131.3	24	W.	124.1	24	S.W.	175.3	43	N.E.	131.9	26	W.	136.3	46
1882	S.W.	134.2	18	W.	131.3	17	W.	130.1	28	W.	137.6	28	N.N.E.	130.7	20	N.E.	141.4	28	W.	132.9	48
1883	W.	131.9	16	W.	126.6	17	W.	126.0	20	W.	146.6	26	N.E.	132.9	16	N.E.	141.6	28	W.	143.9	42
1884	W.	102.1	18	W.	119.2	20	W.	119.4	18	W.	119.6	24	N.E.	109.5	14	N.E.	139.8	34	W.	138.1	40
1885	W.	101.6	20	W.	96.9	22	W.	85.4	18	W.	81.1	17	E.S.E.	156.7	36	N.E.	158.6	36	W.	120.0	36
1886	W.	130.2	22	W.	121.3	18	W.	112.5	16	W.	131.5	24	N.E.	148.9	30	N.E.	118.4	20	W.	136.4	37
1887	W.	128.2	20	W.	130.0	18	W.	124.9	23	W.	136.1	34	W.	122.3	18	N.E.	153.9	37	W.	140.5	37
1888	W.	133.4	21	W.	117.3	23	W.	109.9	23	W.	109.9	18	N.E.	70.9	18	W.	87.1	26	W.	122.4	33

The average annual direction is west; average daily movement, 125.6 miles, and average hourly velocity, 5.2 miles.

Table Showing the Number of Days in each Month and each Year the Temperature was above Ninety Degrees and below Thirty-two Degrees, at Los Angeles.

YEAR:	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888
January—Above 90°	0	0	0	0	0	0	0	0	0	0	0	0
Below 32°	0	0	1	0	0	1	0	0	0	0	0	4
February—Above 90°	0	0	0	0	0	0	0	0	0	0	0	0
Below 32°	0	0	0	0	0	2	0	0	0	0	0	0
March—Above 90°	0	1	0	0	0	0	0	0	0	0	0	0
Below 32°	0	0	0	0	0	0	0	0	0	0	0	0
April—Above 90°	0	0	0	1	0	0	0	0	0	0	0	2
Below 32°	0	0	0	0	0	0	0	0	0	0	0	0
May—Above 90°	0	2	1	0	0	3	0	0	0	2	0	0
Below 32°	0	0	0	0	0	0	0	0	0	0	0	0
June—Above 90°	0	3	0	0	0	6	2	1	4	2	3	3
Below 32°	0	0	0	0	0	0	0	0	0	0	0	0
July—Above 90°	3	0	0	0	5	3	0	5	7	9	3	6
Below 32°	0	0	0	0	0	0	0	0	0	0	0	0
August—Above 90°	0	0	2	0	4	5	8	7	11	13	3	8
Below 32°	0	0	0	0	0	0	0	0	0	0	0	0
September—Above 90°	1	4	4	1	7	2	10	1	5	1	2	9
Below 32°	0	0	0	0	0	0	0	0	0	0	0	0
October—Above 90°	0	1	6	0	0	0	0	2	0	5	2	2
Below 32°	0	0	0	0	0	0	0	0	0	0	0	0
November—Above 90°	0	0	0	0	0	0	0	0	0	0	0	0
Below 32°	0	0	0	0	0	0	0	0	0	0	0	0
December—Above 90°	0	0	0	0	0	0	0	0	0	0	0	0
Below 32°	0	1	1	0	0	0	0	0	0	0	0	0
Annual—Above 90°	4	5	18	2	17	10	27	15	26	27	17	30
Below 32°	0	1	1	1	1	0	3	0	0	0	0	4

Table Showing the Monthly and Annual Mean Relative Humidity and Averages, at Los Angeles.

YEAR.	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1877	61.7	69.9	73.9	71.3	71.7	72.8	63.9	63.4	63.5	66.9	45.3	57.4	60.1
1878	61.7	69.9	73.9	71.3	71.7	72.8	70.9	70.3	62.2	60.4	58.5	48.1	66.0
1879	64.0	73.9	71.0	65.2	62.3	65.3	69.6	68.4	81.2	53.2	71.2	70.9	68.0
1880	64.3	66.9	76.1	73.1	73.0	66.9	74.2	74.0	71.3	65.0	56.3	70.9	69.3
1881	64.8	62.9	65.3	71.2	70.0	68.6	67.4	68.8	66.8	70.4	51.2	64.1	66.0
1882	69.6	63.5	65.1	71.9	65.8	68.5	67.2	66.4	66.9	63.1	59.0	54.8	65.2
1883	52.8	60.6	80.1	68.2	71.7	72.5	72.8	71.1	66.9	69.2	59.5	68.3	67.4
1884	61.9	71.1	76.0	79.4	76.1	75.5	72.4	72.6	72.5	71.8	71.2	77.2	73.1
1885	65.2	66.3	65.6	69.6	75.3	68.9	71.0	69.8	75.9	77.9	77.7	71.6	71.2
1886	77.8	75.5	80.9	80.1	74.5	75.9	72.8	77.2	81.6	80.0	67.1	79.1	76.9
1887	66.3	81.5	78.5	78.9	72.9	78.5	82.7	80.9	82.0	72.7	78.1	74.4	77.3
1888	80.1	83.2	77.7	75.2	79.2	74.1	75.6	79.4	77.7	82.4	74.1	71.0	77.5
Averages	66.2	70.5	73.6	73.1	72.0	71.6	71.7	71.9	72.4	69.4	64.1	67.3	69.9

The following table shows the number of clear, fair, and cloudy days in each month and each year, with averages. It will be observed that the average annual number of clear days is 180; fair days, 137; and the average annual number of cloudy days is but 48; showing an average of 317 days on which the sun shone brightly or was but partially obscured, at Los Angeles:

Table Showing the Number of Clear, Fair, and Cloudy Days in Each Month, and Each Year, with Averages.

MONTH.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	Aver- age.
January—Clear.....		13	16	20	17	18	21	17	*17	13	21	14	17
Fair.....		10	10	10	9	6	6	8	*10	6	10	8	8
Cloudy.....		8	5	1	5	7	4	6	3	12	0	9	6
February—Clear.....		13	6	16	14	16	13	11	16	20	13	14	14
Fair.....		6	13	8	12	9	9	8	11	4	9	8	9
Cloudy.....		9	9	5	2	3	6	10	1	4	6	7	5
March—Clear.....		7	16	16	15	15	6	9	14	14	18	10	13
Fair.....		18	5	10	13	5	14	11	12	11	12	12	11
Cloudy.....		6	10	5	3	11	11	11	5	6	1	9	7
April—Clear.....		8	13	8	6	16	10	11	11	13	11	14	11
Fair.....		13	12	10	13	9	18	13	12	10	10	8	12
Cloudy.....		9	5	12	11	5	2	7	7	7	9	8	7
May—Clear.....		11	22	15	9	12	12	7	4	14	14	5	11
Fair.....		10	9	11	15	11	15	16	21	14	*11	18	14
Cloudy.....		10	0	5	7	8	4	8	6	3	5	8	6
June—Clear.....		3	3	7	12	11	15	8	15	*10	17	17	11
Fair.....		15	24	22	16	14	12	9	14	*16	10	12	15
Cloudy.....		12	3	1	2	5	3	13	1	3	3	1	4
July—Clear.....	19	5	23	5	11	9	11	24	14	15	13	17	13
Fair.....	11	26	18	23	19	22	19	7	16	14	13	13	17
Cloudy.....	1	0	0	3	1	0	1	0	1	2	5	1	1
August—Clear.....	22	10	17	12	12	*16	20	23	16	21	11	23	*17
Fair.....	8	19	14	16	18	*6	10	8	14	8	20	8	*12
Cloudy.....	1	2	0	3	1	1	1	0	1	2	0	0	*1
September—Clear.....	16	15	18	6	17	26	22	20	18	15	15	21	18
Fair.....	11	14	12	23	11	2	8	8	12	15	12	7	11
Cloudy.....	3	1	0	1	2	2	0	2	0	0	3	2	1
October—Clear.....	18	17	19	9	19	20	13	25	21	15	24	16	18
Fair.....	11	13	9	16	9	9	14	4	10	14	6	10	10
Cloudy.....	2	1	3	6	3	2	4	2	0	2	1	5	3
November—Clear.....	22	17	17	17	25	16	18	21	14	22	18	15	18
Fair.....	7	11	10	12	5	8	11	7	8	7	9	8	9
Cloudy.....	1	2	3	1	0	6	1	2	8	1	3	7	3
December—Clear.....	18	22	13	10	15	22	22	*13	21	18	21	18	18
Fair.....	7	4	10	10	14	8	7	*11	5	12	7	6	8
Cloudy.....	6	5	8	11	2	1	2	6	5	1	3	7	5
Annual—Clear.....	115	141	173	141	172	197	183	189	181	190	196	184	180
Fair.....	55	159	146	171	154	109	143	110	145	131	129	118	136
Cloudy.....	14	65	46	54	39	51	39	66	38	43	39	64	49

*Record incomplete.

Precipitation, Including Deposit from Fog and Dew, in Inches and Hundredths.—Table Showing the Monthly, Annual, and Average Precipitation, at Los Angeles.

YEAR.	Jan.	Feb.	March.	April.	May	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1877.....							.00	.00	.00	.86	.45	3.93	5.24
1878.....	3.33	7.68	2.57	1.71	.66	.07	.00	.00	.00	.14	.00	4.70	20.86
1879.....	3.59	.97	.49	1.19	.24	.03	.00	.00	.00	.93	3.44	6.53	17.41
1880.....	1.33	1.56	1.45	5.06	.04	.00	T.	T.	.00	.14	.67	8.40	18.65
1881.....	1.43	.36	1.66	.46	.01	.00	.00	T.	T.	.82	.27	.52	5.53
1882.....	1.01	2.66	2.66	1.83	.63	T.	.00	.00	T.	.05	1.82	.08	10.74
1883.....	1.62	3.47	2.87	.15	2.02	.03	T.	.00	.00	1.42	.00	2.56	14.14
1884.....	3.15	13.37	12.36	3.58	.39	1.39	.02	.02	T.	.39	1.07	4.65	40.39
1885.....	1.05	.01	.01	2.01	.06	T.	T.	T.	.05	.30	5.55	1.65	10.69
1886.....	7.78	1.41	2.52	3.32	.01	.11	.27	.21	.11	.02	1.18	.26	17.20
1887.....	.20	9.25	.29	2.36	.20	.07	.07	T.	.18	.17	.80	2.68	16.27
1888.....	6.04	.80	3.17	.12	.05	.01	.04	.10	.03	.40	4.02	6.26	21.04
Ave'ges	2.78	3.78	2.73	1.98	.39	.16	.03	.03	.03	.47	1.61	3.12	16.51

RAINFALL AT LOS ANGELES, LOS ANGELES COUNTY.

The following figures, from February, 1872, to June, 1877, are from the records of Mr. C. Duycommun, of Los Angeles; from July, 1877, to date, from Signal Office records:

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	Septem-ber.	October.	Novem-ber.	Decem-ber.	Total for Year.	Season of.	Total for Season.
1872	---	2.25	.43	.97	.10	none	none	.22	none	none	none	4.42	8.39	1872-73	13.96
1873	---	7.19	.05	none	none	none	none	1.06	none	none	.74	5.74	16.86	1873-74	24.78
1874	---	5.51	1.09	.45	.42	none	none	none	.06	1.81	1.89	.20	21.20	1874-75	21.67
1875	---	17.22	.15	.07	.05	none	none	none	none	none	7.57	.82	26.10	1875-76	26.74
1876	---	6.54	3.41	.45	.03	none	none	none	none	.40	none	none	18.75	1876-77	5.28
1877	---	3.48	.83	.26	.30	none	none	none	none	.86	.45	3.93	10.12	1877-78	21.26
1878	---	3.33	7.68	1.71	.66	.07	none	none	none	.14	none	4.70	20.86	1878-79	11.35
1879	---	3.59	2.57	1.19	.24	.03	none	none	none	.93	3.44	6.53	17.41	1879-80	20.34
1880	---	1.33	.49	5.06	.04	none	sprin.	sprin.	none	.14	.67	8.40	18.65	1880-81	13.13
1881	---	1.43	1.45	.46	.01	none	none	sprin.	sprin.	.82	.27	.52	5.53	1881-82	10.40
1882	---	1.01	2.66	1.83	.63	sprin.	none	none	sprin.	.05	1.82	.08	10.74	1882-83	12.11
1883	---	1.62	3.47	.15	2.02	.03	sprin.	none	none	1.42	none	2.56	14.14	1883-84	38.22
1884	---	3.15	13.37	3.58	.39	1.39	.02	.02	sprin.	.39	1.07	4.65	40.39	1884-85	9.29
1885	---	1.05	.01	2.01	.06	sprin.	sprin.	sprin.	.05	.30	5.55	1.65	10.69	1885-86	22.72
1886	---	7.78	1.41	3.32	.01	.11	.27	.21	.11	.02	1.18	.26	17.22	1886-87	14.42
1887	---	.20	.29	2.36	.20	.07	.07	sprin.	.18	.17	.80	2.68	16.07	1887-88	14.09
1888	---	6.04	3.17	.12	.05	.01	.04	.10	.03	.40	4.02	6.26	21.04	1888-89	*10.85

*Up to January 1, 1889.

The following table shows the number of days on which .01 of an inch or more precipitation occurred, excluding fog and dew:

YEAR.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	An'ual.
1877							0	0	0	2	1	0	3
1878	7	10	9	7	10	4	0	0	0	3	0	4	54
1879	9	7	6	6	2	2	0	0	0	3	3	10	48
1880	5	8	6	13	1	0	0	0	0	2	3	13	51
1881	3	4	5	4	1	0	0	0	0	3	2	2	24
1882	6	5	10	6	3	0	0	0	0	4	3	2	39
1883	3	4	7	3	6	2	0	0	0	2	0	6	33
1884	5	14	18	9	4	6	0	0	0	2	3	10	71
1885	2	0	1	8	1	0	0	0	0	1	9	4	26
1886	10	2	8	4	0	1	1	1	0	1	1	3	32
1887	2	13	2	5	3	1	2	0	1	1	3	4	37
1888	9	5	11	3	1	0	1	1	0	3	8	6	48
Av'ges	6	7	8	6	3	2	3	2	1	2	3	5	42

Table showing the precipitation by seasons, and the beginning and ending of the rainy season at Los Angeles:

Precipitation by Seasons.

1878-79	11.35	1884-85	9.25
1879-80	20.34	1885-86	22.58
1880-81	13.13	1886-87	13.76
1881-82	10.40	1887-88	14.01
1882-83	12.11	1888-89	*10.68
1883-84	38.22		

* Precipitation for 1888-89 is from October to December, 1888.

*Beginning and Ending of Rainy Season at Los Angeles. **

YEAR.	Began.	Ended.
1878-79	December 28, 1878	June 16, 1879.
1879-80	October 12, 1879	May 11, 1880.
1880-81	October 8, 1880	May 16, 1881.
1881-82	October 25, 1881	May 25, 1882.
1882-83	October 1, 1882	June 11, 1883.
1883-84	October 4, 1883	June 21, 1884.
1884-85	October 9, 1884	May 11, 1885.
1885-86	October 16, 1885	April 13, 1886.
1886-87	October 10, 1886	May 31, 1887.
1887-88	September 21, 1887	May 4, 1888.
1888-89	October 17, 1888.	

NOTE.—Showers of rain occurred in July and August, 1886, aggregating .45 of an inch, and light showers fell in June and July, 1888.

The following table shows the seasonal and annual averages as deduced from the foregoing data, and will be valuable as showing the yearly characteristic of the Los Angeles climate:

	Winter.	Spring.	Summer.	Autumn.	Annual.
Mean average temperature	54.1	58.9	68.0	62.7	61.0
Mean average humidity	68.0	72.9	71.7	68.6	70.3
Mean average number of clear days	49	35	41	54	180
Mean average number of fair days	25	37	44	30	136
Mean average number of cloudy days	16	20	6	7	49
Prevailing direction of wind	N.E.	W.	W.	W.	W.
Mean average daily velocity of wind	138.5	133.0	116.9	120.6	125.6

Average annual precipitation, 16.10 inches.

Average seasonal precipitation, 16.52 inches.

Average annual number of days on which an appreciable rain fell, 42.

Average beginning of rainy season is in October, and average ending in May.

RIVERSIDE WEATHER—COMPARISON OF CLIMATES.

From the "Riverside Press," 1888.

The report of the State Board of Health, just received, furnishes a great amount of readable matter upon a variety of topics relating to health conditions. Opening at random, we find a table of temperatures at prominent health resorts, from which we select a few for comparison with California towns. The following table gives the mean temperatures of the seasons and the mean annual temperature:

	Winter.	Spring.	Summer.	Autumn.	Mean Annual Temp.
Madeira	60.6	62.4	69.6	67.3	65.0
Palermo	53.1	59.3	74.7	66.8	64.4
St. Michael's (Azores)	57.8	61.2	68.3	62.3	62.4
Naples	48.5	58.5	70.8	64.5	61.4
Nice	47.8	56.2	72.3	61.6	59.5
Florence	44.3	56.0	74.0	60.7	59.0
Red Bluff, California	46.8	59.8	79.7	63.2	62.4
Auburn	46.2	56.4	74.3	61.7	59.7
Oroville	52.0	64.5	78.8	64.3	64.9
Fresno	50.2	64.9	84.1	67.6	66.7
Los Angeles	53.6	58.4	67.8	62.7	60.6
Riverside	50.4	64.1	73.7	65.7	63.5
San Diego	54.6	58.1	66.8	62.6	60.5

The above would seem to indicate that in the main the temperatures do not differ materially, and yet it is well known that a table giving merely the mean temperature of a locality conveys very little idea of what the climate really is. To illustrate:

	Highest Temp.	Lowest Temp.	Annual Rainfall.
Red Bluff	110	16	27.46
Oroville	102	20	22.11
Auburn	106	13	33.15
Fresno	115	18	9.57
Los Angeles	102	28	17.64
Riverside	105	25	8.16
San Diego	101	32	11.01

Another thing which these tables show, and this is something of interest to the health-seeker. It is constantly urged that the central portion of the State is a more agreeable climate. We admit that it has features which are more attractive, but they are features due to conditions which the man with delicate lungs or the rheumatic patient would do well to consider. The greater prevalence of natural woods adds greatly to the beauty of the scenery, which is often heightened by the undulating character of much of the country in what is called their "thermal belt." The greater number of live oaks and other wild trees indicate a moister climate, and the hilly lands best adapted to fruit growing are expensive to irrigate. The second table fully confirms the idea of a moister climate, if we were not convinced by the indications nature gives of the fact in the more common growth of forest trees. Compare the rainfall of Riverside, 8.16 inches, and Colton, 9.84 inches, with Auburn, 33.15 inches, and Oroville's 22.11 inches. It will appear that where there is one rainy day in Riverside in winter there are over four at Auburn, and nearly three at Oroville. Here is a point for delicate people to study who are looking over this State with a view to settlement. The advantage which California's climate offers over that of the East is not simply its absence of severe cold, but rather the smaller amount of stormy weather which makes almost constant out-of-door life possible. Nowhere at any desirable point in the State can be found a spot where there are fewer rainy days in the year than in Riverside, and this is why it has become so popular a resort for people with delicate lungs, or with rheumatic troubles. It is this peculiarity which gives and always will give Southern California the advantage over the northern part of the State as a place for residence, at least for delicate people.

From the second table it will be seen that there are reasons shown why Riverside—and this applies equally to all this great San Bernardino Valley—is better adapted to orange and lemon growing than the points at the north where they are now so energetically planting citrus trees. Oroville has an annual mean temperature a little higher than Riverside, and yet the record shows that the mercury dropped last season 5° lower than it did here, and remained at the low point longer, and we know how dangerous a temperature even 25° is to oranges and lemons. Red Bluff shows a record of 16° and Auburn 13° above, both low enough to ruin all citrus fruits, and the latter figure a dangerous one even to the olive. Fresno, whose hot, dry climate has proved so admirably adapted to raisin making, shows a record of 115° in summer, but drops far below the danger point to oranges, 18° in winter.

Riverside is confessedly the most successful orange-growing section in the State, and yet her experienced growers know how anxious they are when the mercury gets as low as 28° , and that 6° lower than that means the loss of much of the crop. But that difference is just about the advantage this section has over points now selected for orange growing at the north. It is just this greater security to our crops that makes our climate so much to be preferred by those who desire to engage in orange growing, and it is this one item alone which gives much greater value to land in Southern California, which is in hardly any other respect superior.

"Riverside Press" Signal Service Weather Record.

The following shows the highest and lowest temperature, and the average temperature, humidity, and barometer, along with the prevailing direction of wind for each day of each month during the year 1888, at Riverside, California, from the "Riverside Press:"

DATE	Maximum Temp.	Minimum Temp.	Mean Temp.	Average Humidity.	Mean Barometer.	Direction of Wind.
January 1	56.0	30.5	43.3	64.7	30.09	N.W.
January 2	64.0	33.0	48.5	67.1	30.02	W.
January 3	54.5	37.0	45.7	85.0	29.78	S.E.
January 4	54.0	45.5	49.8	79.4	29.64	S.E.
January 5	47.0	36.5	41.8	86.8	29.74	S.E.
January 6	51.0	36.0	43.5	78.0	29.87	S.W.
January 7	46.5	32.0	39.3	66.4	30.00	E.
January 8	47.0	25.5	36.3	59.7	30.00	N.E.
January 9	42.5	34.0	38.3	57.9	30.01	N.
January 10	49.0	32.0	40.5	61.8	30.05	N.E.
January 11	57.0	38.0	47.5	74.1	30.11	N.W.
January 12	54.0	32.0	43.0	80.1	30.13	N.E.
January 13	56.5	37.0	46.8	81.9	30.02	S.W.
January 14	51.0	36.0	43.5	60.3	30.04	N.
January 15	49.0	27.5	38.3	61.1	30.07	N.E.
January 16	51.5	25.5	38.5	66.2	30.12	S.W.
January 17	55.0	30.0	42.5	60.4	30.32	N.
January 18	55.0	36.0	45.5	55.1	30.26	N.E.
January 19	59.0	36.0	47.5	71.5	29.96	N.E.
January 20	54.0	44.0	49.0	96.4	29.93	E.
January 21	63.0	47.5	55.3	89.0	30.02	E.
January 22	65.0	48.5	56.8	82.8	29.94	W.
January 23	66.0	54.0	60.0	81.3	30.06	S.W.
January 24	65.0	53.0	59.0	81.7	30.09	W.
January 25	71.0	42.5	56.8	72.9	30.11	N.E.
January 26	74.0	40.5	57.3	75.3	30.08	N.E.
January 27	62.0	42.0	52.0	82.1	30.06	W.
January 28	65.0	43.0	54.0	85.0	30.03	N.E.
January 29	66.0	41.5	53.8	83.5	30.01	S.W.
January 30	65.0	42.0	53.5	82.9	29.99	N.E.
January 31	58.0	48.0	53.0	82.5	29.96	S.W.
February 1	64.0	48.0	56.0	84.4	29.98	S.W.
February 2	60.0	38.0	49.0	78.1	29.99	E.
February 3	60.0	33.0	46.5	78.9	29.90	W.
February 4	63.0	43.0	53.0	79.5	29.90	S.W.
February 5	64.0	36.0	50.0	73.8	29.90	E.
February 6	65.0	38.5	51.8	67.2	29.91	N.
February 7	64.0	37.0	50.5	78.8	29.90	S.W.
February 8	65.0	36.0	50.5	74.9	29.91	S.W.
February 9	55.0	40.0	47.5	83.2	29.93	S.W.
February 10	57.0	48.0	52.5	82.9	29.95	W.
February 11	69.0	47.0	58.0	83.7	29.99	W.
February 12	67.0	40.0	53.5	77.9	29.99	S.W.
February 13	69.0	48.0	58.5	82.4	29.94	S.W.
February 14	61.0	48.0	54.5	81.7	29.96	N.W.
February 15	52.0	44.0	53.0	81.8	30.00	W.
February 16	56.0	49.0	52.5	86.4	30.06	N.W.
February 17	57.0	46.0	51.5	86.3	30.10	W.
February 18	58.0	49.0	52.5	80.5	30.07	W.
February 19	66.0	46.0	56.5	58.5	29.94	N.
February 20	64.0	36.0	53.1	48.1	29.87	N.
February 21	67.0	51.0	58.2	41.5	29.86	N.
February 22	71.0	53.0	58.5	52.3	29.99	N.
February 23	71.0	39.5	52.8	61.3	30.04	W.
February 24	74.0	38.0	53.8	67.7	30.03	S.W.
February 25	76.5	39.0	56.8	70.5	30.03	W.
February 26	78.0	41.0	57.8	58.1	29.99	S.
February 27	74.5	44.0	59.0	65.5	29.91	W.
February 28	64.0	49.0	54.5	84.6	29.81	S.W.
February 29	51.0	42.0	45.3	82.9	29.67	W.

Rainfall for January, 4.17 inches. Rainfall for February, .90 inch.

RIVERSIDE SIGNAL SERVICE WEATHER RECORD—Continued.

DATE.	Maximum Temp.	Minimum Temp.	Mean Temp.	Average Humidity.	Mean Barometer.	Direction of Wind.
March 1	59.0	32.0	44.8	75.4	29.94	N.E.
March 2	54.0	33.0	46.0	83.8	29.90	S.E.
March 3	57.0	39.0	47.3	78.0	29.96	S.E.
March 4	55.0	36.0	48.0	78.3	30.02	S.W.
March 5	61.0	42.0	59.0	81.4	30.01	W.
March 6	65.5	35.0	51.5	77.3	29.94	W.
March 7	62.0	46.5	44.5	87.5	29.79	N.E.
March 8	60.0	49.0	53.8	92.2	29.74	S.E.
March 9	58.5	46.0	49.5	82.3	30.00	S.W.
March 10	65.5	36.0	50.5	80.3	30.13	S.E.
March 11	74.0	37.0	55.0	66.6	30.15	N.W.
March 12	73.5	39.0	55.3	65.0	30.14	N.E.
March 13	72.5	41.0	56.8	68.2	30.03	W.
March 14	64.0	45.0	56.5	83.3	29.87	S.W.
March 15	65.0	52.0	53.3	81.3	29.90	N.E.
March 16	75.0	42.0	55.0	78.6	29.90	S.W.
March 17	71.0	48.0	57.5	79.2	29.86	S.W.
March 18	60.5	52.0	56.0	82.9	29.82	S.W.
March 19	68.0	52.0	55.8	77.9	29.86	N.W.
March 20	69.0	42.5	54.5	79.8	29.98	W.
March 21	76.0	43.5	55.8	75.5	30.00	N.W.
March 22	74.0	45.0	56.5	75.5	29.92	S.W.
March 23	66.0	52.0	57.3	77.7	29.87	W.
March 24	64.0	50.0	54.5	76.1	29.82	W.
March 25	68.0	46.0	56.5	75.9	29.77	N.W.
March 26	64.0	48.0	54.5	79.3	29.77	N.E.
March 27	66.0	39.0	50.3	62.6	29.93	N.
March 28	70.0	36.0	53.8	75.6	30.00	W.
March 29	71.0	44.0	55.3	78.7	30.00	S.W.
March 30	67.0	43.0	54.8	79.7	30.00	W.
March 31	71.0	46.0	57.0	77.9	30.10	S.W.
April 1	72.5	42.0	56.2	77.2	30.06	S.W.
April 2	75.0	49.0	57.8	73.9	30.00	W.
April 3	73.0	42.0	55.0	78.8	29.88	S.W.
April 4	71.0	44.0	52.0	68.2	29.95	S.W.
April 5	72.5	38.0	56.0	75.1	30.03	S.W.
April 6	77.0	42.0	60.5	79.9	30.05	N.W.
April 7	74.0	48.0	57.5	75.9	30.02	S.W.
April 8	76.0	42.5	73.5	56.0	30.01	N.W.
April 9	78.0	44.0	59.5	57.5	29.96	N.W.
April 10	85.0	52.0	64.5	64.8	29.98	W.
April 11	93.0	48.0	66.2	59.7	30.00	N.W.
April 12	97.5	49.0	75.0	58.1	29.96	N.E.
April 13	96.0	53.0	74.5	41.9	29.92	N.E.
April 14	86.0	57.0	68.5	68.3	29.93	S.W.
April 15	76.0	59.5	66.5	75.9	29.94	W.
April 16	71.0	56.5	61.0	78.6	29.88	S.W.
April 17	67.0	55.0	60.0	80.9	29.88	W.
April 18	72.0	56.0	60.5	79.0	29.93	S.E.
April 19	82.0	52.0	65.5	75.9	29.89	W.
April 20	76.0	58.0	66.5	70.2	29.89	W.
April 21	74.0	58.0	65.5	81.6	29.91	S.W.
April 22	76.0	58.0	66.5	75.8	29.93	N.W.
April 23	73.0	58.0	64.5	78.9	29.96	N.W.
April 24	69.0	56.0	61.5	75.2	29.94	N.W.
April 25	69.0	46.0	57.5	72.2	29.90	S.W.
April 26	73.0	39.0	57.5	56.6	29.92	S.W.
April 27	78.0	42.0	60.0	59.7	30.00	W.
April 28	89.0	48.0	68.0	59.6	30.00	N.W.
April 29	89.0	52.0	71.0	63.7	29.95	S.W.
April 30	82.0	53.0	67.0	62.8	29.87	S.W.

Rainfall for March, 3.51 inches. Rainfall for April, .15 inch.

RIVERSIDE SIGNAL SERVICE WEATHER RECORD—Continued.

DATE.	Maximum Temp.	Minimum Temp.	Mean Temp.	Average Humidity.	Mean Barometer.	Direction of Wind.
May 1	68.0	56.0	59.5	73.9	29.86	S.W.
May 2	74.0	52.5	60.0	73.7	29.87	S.W.
May 3	74.0	53.5	61.0	76.1	29.89	N.W.
May 4	72.0	54.0	63.0	77.6	29.87	W.
May 5	74.0	56.0	65.0	73.2	29.90	N.W.
May 6	75.0	56.5	62.0	69.7	29.93	W.
May 7	73.0	52.5	61.0	76.1	29.96	S.W.
May 8	76.0	53.0	62.0	75.6	30.00	S.W.
May 9	76.5	52.0	61.5	72.3	29.97	W.
May 10	79.0	53.0	62.0	73.4	29.81	W.
May 11	82.0	53.0	66.5	75.9	29.77	W.
May 12	83.0	56.0	66.0	76.2	29.83	S.W.
May 13	85.0	52.0	67.0	64.8	29.86	W.
May 14	81.0	56.0	64.5	69.4	29.88	S.W.
May 15	75.0	54.0	62.0	76.1	29.88	N.W.
May 16	73.0	55.0	61.5	69.9	29.86	W.
May 17	78.9	52.5	63.0	68.2	29.85	S.W.
May 18	78.0	55.0	64.0	75.3	29.81	W.
May 19	79.0	58.0	64.5	73.5	29.85	W.
May 20	74.0	56.0	62.0	69.0	29.84	N.W.
May 21	73.5	54.0	61.0	69.1	29.84	W.
May 22	72.0	54.0	60.0	68.3	29.85	S.W.
May 23	74.0	53.0	59.0	65.6	29.88	W.
May 24	74.0	49.0	62.5	63.0	29.88	S.W.
May 25	74.0	48.0	61.5	58.4	29.88	W.
May 26	72.0	49.0	61.5	62.0	29.89	S.W.
May 27	78.0	45.5	63.0	60.5	29.90	W.
May 28	85.0	47.0	70.0	62.2	29.87	W.
May 29	84.5	55.0	71.0	59.7	29.84	S.W.
May 30	85.0	53.0	71.0	56.9	29.82	S.W.
May 31	86.0	61.0	72.0	54.9	29.83	S.W.
June 1	82.0	58.0	69.5	60.1	29.91	S.W.
June 2	80.0	55.0	69.0	65.2	29.90	W.
June 3	80.0	54.5	67.0	59.7	29.88	W.
June 4	82.0	49.0	65.0	57.2	29.85	S.W.
June 5	85.0	49.0	66.5	64.9	29.77	W.
June 6	80.0	52.0	65.0	63.7	29.77	N.W.
June 7	82.0	49.0	69.5	52.8	29.81	W.
June 8	94.0	48.0	75.5	43.2	29.82	S.W.
June 9	88.0	52.0	72.0	52.4	29.82	W.
June 10	90.0	51.0	73.0	50.3	29.85	S.W.
June 11	92.5	52.0	75.5	40.9	29.85	S.W.
June 12	89.0	56.0	73.5	45.0	29.84	N.W.
June 13	88.0	56.0	74.0	53.9	29.82	W.
June 14	90.0	57.5	75.5	46.6	29.85	W.
June 15	89.0	54.5	75.5	55.2	29.85	N.W.
June 16	88.0	56.0	74.5	55.4	29.84	W.
June 17	78.0	58.0	67.5	61.5	29.84	S.W.
June 18	80.0	53.5	70.5	60.3	29.81	S.W.
June 19	83.0	53.0	71.5	57.7	29.80	W.
June 20	94.0	52.0	76.5	54.9	29.79	W.
June 21	95.0	58.0	78.0	49.5	29.77	N.W.
June 22	88.0	59.0	74.5	62.7	29.79	W.
June 23	87.0	62.0	71.5	59.4	29.83	W.
June 24	85.0	60.0	71.0	65.6	29.81	N.W.
June 25	84.0	60.5	71.5	69.5	29.80	W.
June 26	83.5	61.0	72.0	71.5	29.90	W.
June 27	82.0	61.0	72.0	65.9	29.90	W.
June 28	82.0	63.0	72.5	67.3	29.88	N.W.
June 29	84.0	63.0	73.0	59.1	29.91	S.W.
June 30	84.0	57.0	72.0	60.0	29.91	S.W.

Rainfall for May, .04 inch.

RIVERSIDE SIGNAL SERVICE WEATHER RECORD—Continued.

DATE.	Maximum Temp.	Minimum Temp.	Mean Temp.	Average Humidity.	Mean Barometer.	Direction of Wind.
July 1.....	94.0	53.0	74.8	43.7	29.88	N.
July 2.....	91.0	57.0	73.0	64.1	29.77	S.W.
July 3.....	93.0	59.0	77.2	52.7	29.82	S.W.
July 4.....	95.5	64.0	80.5	37.5	29.88	S.
July 5.....	95.0	62.0	80.5	45.0	29.91	S.
July 6.....	92.0	58.0	76.8	44.3	29.90	S.
July 7.....	89.0	60.0	77.2	58.5	29.85	S.
July 8.....	91.0	53.0	73.0	60.1	29.94	S.W.
July 9.....	94.0	53.5	78.5	57.5	29.90	S.
July 10.....	90.5	60.5	73.5	67.0	29.82	S.
July 11.....	91.0	66.0	76.8	62.3	29.83	S.
July 12.....	88.0	44.0	73.0	44.2	29.93	S.W.
July 13.....	95.0	48.0	74.5	48.2	29.94	S.W.
July 14.....	98.5	55.0	80.5	48.8	29.93	N.W.
July 15.....	100.5	60.5	84.0	46.7	29.89	W.
July 16.....	95.0	63.5	83.8	48.8	29.87	W.
July 17.....	95.5	63.5	81.3	52.5	29.87	S.W.
July 18.....	96.0	63.0	82.0	49.4	29.89	W.
July 19.....	98.5	64.0	82.0	48.1	29.93	W.
July 20.....	100.0	71.0	83.8	48.1	30.01	N.W.
July 21.....	100.0	66.0	86.2	46.1	30.00	S.W.
July 22.....	98.0	65.0	84.0	50.9	29.97	W.
July 23.....	94.5	63.0	82.5	52.6	29.92	W.
July 24.....	91.5	63.0	79.2	58.2	29.89	S.W.
July 25.....	91.5	62.0	77.8	61.0	29.90	S.W.
July 26.....	95.0	59.0	81.5	55.7	29.89	W.
July 27.....	95.0	59.0	80.5	54.0	29.86	W.
July 28.....	92.0	58.0	77.0	66.1	29.85	S.W.
July 29.....	94.0	57.0	79.5	55.9	29.87	S.W.
July 30.....	89.0	61.0	76.0	63.2	29.89	W.
July 31.....	87.0	62.0	74.5	69.8	29.88	W.
August 1.....	90.5	55.0	75.5	54.1	29.93	S.W.
August 2.....	91.5	51.0	74.0	53.0	29.93	S.W.
August 3.....	96.0	59.0	78.0	49.5	29.92	W.
August 4.....	97.0	56.0	80.0	53.0	29.90	S.W.
August 5.....	97.0	57.5	79.5	42.1	29.88	N.W.
August 6.....	96.0	56.0	81.0	47.5	29.87	S.W.
August 7.....	95.5	58.0	79.8	52.2	29.90	S.W.
August 8.....	95.0	58.0	78.0	58.0	29.88	W.
August 9.....	94.0	58.0	78.5	53.7	29.85	S.W.
August 10.....	99.0	57.5	83.0	43.0	29.86	N.W.
August 11.....	102.5	58.5	85.7	44.3	29.91	W.
August 12.....	100.0	66.0	84.5	46.7	29.91	S.W.
August 13.....	102.5	64.0	85.0	48.5	29.89	S.W.
August 14.....	98.0	64.0	82.3	50.9	29.83	N.W.
August 15.....	88.0	66.0	77.0	61.2	29.80	S.W.
August 16.....	86.0	64.0	74.5	55.9	29.89	W.
August 17.....	86.5	60.0	76.0	62.7	29.93	W.
August 18.....	90.0	51.0	74.2	52.2	29.99	S.W.
August 19.....	93.0	58.0	79.5	48.5	29.96	S.W.
August 20.....	91.0	56.0	75.0	48.1	29.90	N.
August 21.....	90.0	55.5	74.0	62.1	29.85	W.
August 22.....	96.0	58.0	81.8	55.3	29.84	S.W.
August 23.....	97.0	59.0	78.5	58.7	29.84	W.
August 24.....	95.0	61.0	78.8	61.8	29.83	S.W.
August 25.....	94.0	62.0	79.0	65.9	29.82	W.
August 26.....	94.0	61.0	80.0	61.4	29.83	S.W.
August 27.....	95.0	60.0	78.5	64.1	29.87	S.W.
August 28.....	95.0	60.5	81.5	61.2	29.89	W.
August 29.....	92.0	65.0	81.5	58.4	29.85	S.W.
August 30.....	95.0	62.0	80.3	59.1	29.84	S.W.
August 31.....	97.0	63.0	83.0	57.1	29.89	S.W.

RIVERSIDE SIGNAL SERVICE WEATHER RECORD—Continued.

DATE.	Maximum Temp.	Minimum Temp.	Mean Temp.	Average Humidity.	Mean Barometer.	Direction of Wind.
September 1	100.0	64.0	82.5	53.2	29.90	S.W.
September 2	101.0	65.0	84.5	49.6	29.88	S.W.
September 3	102.0	67.5	86.5	43.4	29.83	W.
September 4	100.0	66.0	84.3	55.1	29.83	S.W.
September 5	93.0	62.0	80.5	61.4	29.87	N.W.
September 6	98.0	58.5	81.0	55.5	29.88	W.
September 7	102.5	60.0	85.0	38.7	29.87	S.W.
September 8	98.0	62.0	80.3	59.6	29.85	N.W.
September 9	97.0	63.0	80.0	57.3	29.83	W.
September 10	95.5	63.5	80.3	57.8	29.71	S.W.
September 11	89.0	62.0	77.5	63.9	29.69	W.
September 12	90.0	62.0	75.5	68.6	29.78	S.W.
September 13	90.0	65.0	76.5	66.9	29.81	S.W.
September 14	95.0	63.0	77.0	60.6	29.79	W.
September 15	97.5	62.0	78.8	54.3	29.83	S.W.
September 16	100.0	67.5	82.0	49.9	29.85	S.W.
September 17	91.0	68.0	79.0	54.3	29.81	W.
September 18	86.0	65.0	75.5	61.9	29.81	S.W.
September 19	88.0	54.0	73.8	64.4	29.89	S.W.
September 20	95.0	61.0	76.8	60.6	29.89	W.
September 21	96.0	63.0	76.8	51.5	29.85	S.W.
September 22	85.0	67.0	74.2	66.3	29.84	S.W.
September 23	85.0	65.0	73.5	60.4	29.89	W.
September 24	88.0	56.0	73.5	62.0	29.96	S.W.
September 25	96.0	56.0	79.0	52.7	29.93	W.
September 26	100.0	63.0	82.0	45.5	29.88	S.W.
September 27	95.0	62.0	78.0	49.9	29.88	S.W.
September 28	93.0	58.0	76.3	72.0	29.91	W.
September 29	91.0	57.0	75.5	64.8	29.95	S.W.
September 30	87.0	54.0	73.5	66.1	29.94	W.
October 1	77.0	58.0	69.0	64.9	29.87	S.W.
October 2	79.0	61.0	67.0	71.6	29.84	N.W.
October 3	79.0	61.0	67.8	71.1	29.84	N.W.
October 4	79.0	59.0	66.8	77.3	29.83	W.
October 5	70.0	57.0	65.0	81.7	29.83	W.
October 6	75.0	59.5	65.3	72.9	29.87	S.W.
October 7	80.0	59.0	67.5	71.6	29.90	S.W.
October 8	87.0	48.0	66.0	64.9	29.90	W.
October 9	93.0	50.0	72.5	49.7	29.88	W.
October 10	98.0	55.0	75.5	47.1	29.86	S.W.
October 11	97.0	56.0	72.5	47.7	29.86	W.
October 12	91.0	53.5	71.5	44.8	29.88	S.W.
October 13	87.0	50.0	67.5	56.6	29.87	W.
October 14	86.0	48.0	70.0	58.2	29.89	N.W.
October 15	86.0	49.5	69.0	60.1	29.90	S.W.
October 16	84.0	49.0	67.0	60.1	29.88	S.W.
October 17	74.0	51.0	65.0	65.9	29.80	N.E.
October 18	66.0	59.0	63.0	89.8	29.83	N.W.
October 19	80.0	57.0	69.3	67.2	29.90	W.
October 20	78.0	50.0	65.3	72.6	29.87	S.W.
October 21	76.5	54.0	68.3	45.4	29.90	N.
October 22	82.0	53.0	70.5	42.5	29.99	N.
October 23	83.0	46.0	65.5	59.4	29.98	W.
October 24	76.0	43.0	58.8	54.9	29.90	W.
October 25	74.0	49.0	61.0	59.9	29.84	N.W.
October 26	74.0	49.0	61.5	76.5	29.84	N.W.
October 27	81.0	46.0	64.0	61.9	29.88	S.W.
October 28	84.0	48.0	67.3	50.3	29.93	S.W.
October 29	74.0	49.0	64.5	75.3	29.93	N.W.
October 30	70.0	55.0	67.0	68.7	29.91	N.
October 31	68.0	55.0	64.5	70.3	29.87	W.

Rainfall for October, .10 inch.

RIVERSIDE SIGNAL SERVICE WEATHER RECORD—Continued.

DATE.	Maximum Temp.	Minimum Temp.	Mean Temp.	Average Humidity.	Mean Barometer.	Direction of Wind.
November 1	74.0	57.0	64.5	69.1	29.99	N.W.
November 2	79.0	45.0	65.0	59.2	30.04	S.
November 3	75.0	58.0	68.5	72.4	29.94	W.
November 4	69.0	57.0	63.5	73.9	29.94	S.W.
November 5	70.0	48.0	60.0	53.4	29.99	N.
November 6	73.0	38.0	58.0	53.7	29.97	N.W.
November 7	73.0	39.0	60.3	62.5	29.92	N.
November 8	73.0	45.0	60.8	53.0	29.95	S.
November 9	71.0	38.0	60.0	56.2	29.97	N.E.
November 10	72.0	40.0	61.5	64.2	29.89	N.W.
November 11	69.0	39.5	58.5	62.8	29.85	W.
November 12	69.0	41.5	57.5	75.4	29.90	S.W.
November 13	72.5	37.0	63.0	72.3	29.96	W.
November 14	70.0	37.0	57.0	69.2	29.97	N.W.
November 15	68.0	44.0	57.5	73.6	29.93	S.
November 16	62.0	50.0	58.5	85.3	29.86	S.E.
November 17	68.0	53.0	62.5	83.9	29.90	S.E.
November 18	70.0	57.0	65.5	78.1	29.98	S.W.
November 19	74.0	49.5	65.5	74.8	30.02	W.
November 20	73.5	49.0	62.0	73.5	29.88	N.W.
November 21	69.0	51.0	60.5	73.2	29.85	N.W.
November 22	66.0	45.0	57.0	83.4	29.80	S.
November 23	62.0	49.0	57.0	82.5	29.66	S.E.
November 24	66.0	49.0	58.5	70.4	29.68	N.
November 25	69.0	52.0	61.5	66.5	29.79	W.
November 26	64.0	54.5	59.0	73.1	29.87	S.W.
November 27	67.0	51.0	57.0	73.6	29.88	W.
November 28	66.0	41.0	55.0	68.5	29.00	S.W.
November 29	62.0	37.0	51.5	72.5	29.00	S.W.
November 30	63.0	36.0	50.5	73.7	29.96	S.W.
December 1	65.0	38.0	52.5	73.9	29.98	W.
December 2	69.0	37.0	56.5	60.3	30.02	N.W.
December 3	72.0	41.0	58.0	61.3	30.07	N.E.
December 4	73.0	43.0	57.5	56.8	30.10	N.E.
December 5	72.0	41.0	57.5	44.9	29.94	N.E.
December 6	67.0	41.0	54.5	65.9	29.77	W.
December 7	70.0	39.0	55.5	67.4	29.87	S.W.
December 8	70.0	37.0	56.5	67.3	30.03	S.W.
December 9	72.0	39.0	56.5	61.3	29.95	W.
December 10	59.0	38.0	45.5	-----	29.90	W.
December 11	69.0	33.0	50.5	-----	29.89	N.
December 12	68.0	34.0	47.2	-----	29.89	E.
December 13	60.0	40.0	51.8	-----	29.87	S.E.
December 14	53.0	46.0	49.0	-----	29.88	W.
December 15	60.0	46.0	54.5	-----	30.09	S.E.
December 16	62.0	52.0	54.5	-----	30.14	W.
December 17	70.0	47.0	57.5	-----	30.03	N.
December 18	71.0	51.0	59.2	-----	30.04	N.
December 19	73.0	49.0	61.8	-----	30.00	N.
December 20	72.0	46.0	57.2	-----	29.95	E.
December 21	63.0	50.0	55.3	-----	29.77	S.E.
December 22	53.0	48.0	50.2	-----	29.61	S.E.
December 23	58.0	46.5	51.0	-----	29.72	W.
December 24	60.0	45.0	51.8	-----	29.89	W.
December 25	59.0	43.0	50.5	-----	29.99	E.
December 26	54.0	45.0	51.2	-----	29.95	S.E.
December 27	62.0	46.0	49.5	-----	29.96	W.
December 28	56.0	38.0	46.5	-----	30.01	W.
December 29	61.0	36.0	46.0	-----	30.06	W.
December 30	58.0	36.0	46.2	-----	30.07	N.
December 31	59.0	34.0	47.3	-----	30.08	N.

Rainfall for November, 2.66 inches. Rainfall for December, 2.99 inches.

Report for the Year 1888.

Mean barometer	29.901
Highest barometer, January seventeenth	30.39
Lowest barometer, December twenty-second	29.58
Yearly range	.81
Highest temperature, September seventh	105°
Lowest temperature, January twelfth and sixteenth	25°
Mean temperature	62.1°
Yearly range	70°
Greatest daily range, June eighth	51°
Least daily range, December twenty-second	5°
Mean daily range	28°
Mean maximum temperature	77.7°
Mean minimum temperature	49.7°
Total rainfall	14.70

The mean temperature for the past eight years is 63.9°, showing the past year to be 1.8° cooler than the average. Light shocks of earthquake were observed on April eighth, at 7:40 P. M.; April ninth, at 7:05 A. M.; April twelfth, at 5:15 A. M.; and June fifteenth, at 7:40 P. M.

Summary for the Year 1887.

MONTH.	Mean Temperature.	Highest Temperature.	Lowest Temperature.	Rainfall, in Inches.	Prevailing Wind Direction.
January	51.4	78.0	25.5	.13	N.
February	49.7	84.0	29.0	2.85	S.W.
March	69.0	88.0	39.0	.02	S.W.
April	64.1	89.5	43.0	1.71	S.W.
May	67.4	90.5	44.0	.17	S.W.
June	71.3	99.0	47.0	.00	S.W.
July	76.2	105.0	50.0	.00	S.W.
August	73.6	99.5	51.0	.00	S.W.
September	73.3	98.0	48.0	.00	S.W.
October	66.5	94.0	42.0	.86	S.W.
November	57.9	85.0	33.0	.92	S.W.
December	50.1	72.0	29.5	1.50	S.W.
Yearly average	63.5	105.0	25.5	8.16	S.W.

CHINO, SAN BERNARDINO COUNTY.

CHINO, SAN BERNARDINO COUNTY, CAL., February 18, 1889.

Sergeant JAMES A. BARWICK, Observer Signal Corps, Sacramento, California:

DEAR SIR: Replying to your request for a brief and instructive article on the temperature and rainfall of San Bernardino County, with data as far back as possible, I have to say, the data at my command are insufficient to do the subjects justice. I requested several gentlemen to do the work, whose means to make a valuable report are ample, but so far they have declined by their silence. My residence at this place began in October, 1887, when I commenced to keep an accurate record of the temperature of this locality, and have daily continued it. On pages 182-3 of your *Meteorological Review* for 1887, are tables showing the rainfall and temperature at Riverside, San Bernardino, Colton, and other points. As San Bernardino County comprises every elevation, from about sea level on the Colorado Desert to over ten thousand feet on several mountain tops, the reader will understand that to compile comprehensive and accurate meteorological statistics of this county involves the collection of a vast amount of statistics, some of which have never been collected by anybody.

A chief cause of irritation between the southern, central, and northern parts of this great State, is the lack of information about most sections by a great majority of our writers of books, and for the press, both in and out of California. The mass of writers are disposed to be fair, but their very limited knowledge of a State over eight hundred miles in length, embracing nearly every degree of temperature, between 15° below zero and 130° or even more above, with a rainfall varying each year from about two inches at Yuma to over sixty at Shasta, disqualifies nearly all from handling such subjects with tolerable intelligence. Notwithstanding I have been traveling over this State by all modes of conveyance and afoot since 1852, I do not want to be quoted as authority on much of even San Bernardino County. I deem these remarks apt in connection with what follows. This place is situated near the western boundary of San Bernardino County, about eight hundred feet above sea level. The Chino and Spadra hills lie to the south and west a few miles, and the San Gabriel and San Bernardino Mountains (erroneously called Sierra Madres), to the north, some eight miles, and the San Jacinto and other high mountains between here and the great Colorado desert. The rainfall was not accurately noted here during the season of 1887-8, but it amounted to just about 17 inches. The temperature here given is correct: The lowest degree was January sixteenth, when it was 23° at 7 A. M.; on the fifteenth and sixteenth, it was 26° . The highest at noon was July twenty-first, when it was 104° . The days when the mercury rose to and above 100° are: July fifteenth, 101° ; and twenty-first, 104° ; August eleventh, twelfth, and thirteenth, 100° each; September third, 100° ; seventh, 103° ; sixteenth and twenty-sixth, each 101° .

For November, 1887, the lowest temperature was 30° at 7 A. M., on the thirtieth, and the highest, 78° on the twenty-first, at noon; the average for the month being 58.8° . For December, the lowest was 28° at 7 A. M. on the twenty-third, and the highest 72° at noon on the seventeenth; the average for the month being 50.1° . The average for the first twelve days in January, 1888, was 43.5° . The observations in all cases being taken at 7 A. M., noon, and 6 P. M. Following are weekly averages from such observations during the remainder of 1888:

January 19	44.2	July 12	76.1
January 26	56.0	July 19	81.7
February 2	52.7	July 26	82.7
February 9	51.2	August 2	75.0
February 16	52.3	August 9	80.0
February 23	55.4	August 16	78.7
March 1	52.7	August 23	76.1
March 8	50.4	August 30	76.4
March 15	56.0	September 5	83.0
March 22	57.9	September 12	77.4
March 29	54.8	September 19	78.6
April 5	58.1	September 26	76.9
April 12	65.4	October 4	68.9
April 19	66.2	October 11	71.8
April 26	63.1	October 18	68.4
May 3	65.1	October 25	64.4
May 10	64.9	November 1	63.6
May 17	67.3	November 8	60.8
May 24	65.3	November 15	56.9
May 31	67.4	November 22	58.5
June 7	69.2	November 29	56.3
June 14	75.7	December 6	56.4
June 21	74.0	December 13	52.2
June 28	73.9	December 20	57.9
July 5	77.6	December 27	52.6

Average for the four days ending December thirty-first, 48.2° .

San Bernardino County produces everything grown in the temperate and some things that flourish in the torrid zone. The Secretary of the San Bernardino Board of Trade gathered from reliable sources the following information in January, this year, viz.:

A FEW FACTS RELATIVE TO HER PRODUCTS AND IMPROVEMENTS.

Population of the county, 35,000. The assessed valuation of all property in the county, \$26,250,680. Rate of taxation, State and county, \$1 25 outside, and \$1 inside the limits of incorporated towns. The county is free from debt. The county ranks first in the State in the amount of school property per child, and fifth in total valuation of school property.

There are 528 miles of standard gauge, 32½ miles of motor and narrow gauge, and 21 miles of electric railroads (last temporarily operated by horse-power) in the county.

Shipments of oranges, season of 1887-8, 760 carloads; product present season estimated at 1,050 carloads. Raisin shipments the past year, about 325 carloads; dried fruit shipments the past year, over 1,150 tons; wine, product the past year, about 250,000 gallons; honey, product the past year, about 435 tons; canned fruits, product the past year, 30,000 cases; barley, product the past year, 240,000 sacks; lumber, product the past year, 7,400,000 feet; wool clipped the past year, 350,000 pounds; gold and silver, product the past year, \$850,000. There are about 5,000 acres in the county seeded to alfalfa, part of which is used for grazing and part for hay. The shipments in lemons, limes, English walnuts, and almonds are small. Aside from what is dried, canned, or otherwise put up, the crops of peaches, apricots, nectarines, prunes, apples, pears, figs, and olives are used locally. Wheat, oats, and Indian corn are grown in small quantities, and every kind of garden vegetable in great profusion. Lime is a prominent product of the county. Colton marble and building stone are gaining a name away from home. South Riverside boasts of the best tin mine on the continent, also coal, mineral paint, and gypsum deposits; and in the northern part of the county there are heavy deposits of borax, iron, and salt.

Evidently, for want of full information, the Secretary omitted important products. The foothill and mountain valleys of this county produce cherries and apples that are not excelled in the world for flavor and keeping qualities, and they are grown in paying quantities. As high as \$250 to \$300 per acre were realized from cherries and apples in 1888 from trees ranging in age from six to thirteen years. The leading products of this county are now oranges and raisins. Each year increases the growth of oranges, and the quality is unsurpassed. Neither the scale of any kind nor the vine disease has so far injured an orchard or vineyard. Doubtless its inland situation is unfavorable to scale.

Trusting the foregoing will be deemed worthy a place in your next report to the State Agricultural Society, I am,

Yours respectfully,

JOHN WASSON.

Rainfall at San Bernardino, San Bernardino County.—The rainfall at San Bernardino was furnished by Mr. Sidney P. Waite, of the San Bernardino Water Company, and extends from July, 1870, to date.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for Year.	Season of.	Total for Season.
1870							none	none	.02	.09	3.11	.89	15.39	1870-71	13.94
1871	6.91	2.21	.19	.34	.11	.07	none	.04	.13	.60	.88	3.91	9.21	1871-72	8.98
1872	none	2.20	.37	.79	.06	none	none	.18	.04	none	1.17	4.40	16.87	1872-73	15.10
1873	6.50	1.25	.51	.84	.21	none	none	1.06	.02	.01	.74	5.73	23.21	1873-74	23.81
1874	5.51	8.76	1.08	.48	.42	none	none	none	.06	1.82	1.88	2.20	15.21	1874-75	13.65
1875	7.20	.15	.22	.07	.05	none	none	none	none	none	7.50	.02	12.98	1875-76	19.90
1876	6.55	1.92	3.41	.44	.03	.03	none	none	none	.20	.40	none	14.23	1876-77	9.52
1877	3.50	4.03	.83	.26	.30	none	none	none	none	.86	.50	3.95	20.00	1877-78	20.33
1878	3.33	6.68	2.57	1.71	.66	.07	.07	none	.02	.14	.05	4.70	17.54	1878-79	11.54
1879	3.59	1.00	.50	1.20	.24	.03	.11	.02	.01	.94	3.40	6.50	18.99	1879-80	20.36
1880	1.56	1.33	1.45	5.00	.04	none	none	none	none	.14	.67	8.80	5.46	1880-81	13.50
1881	1.40	.36	1.66	.46	.01	none	none	none	none	.80	.27	.50	9.67	1881-82	11.54
1882	1.11	2.65	3.30	2.91	none	none	none	none	none	.10	.15	.45	12.76	1882-83	9.17
1883	1.60	1.10	2.82	2.95	none	none	.19	none	.53	.85	.09	2.63	37.08	1883-84	37.51
1884	1.63	12.20	9.95	5.08	3.17	.59	none	none	none	none	.11	3.75	12.90	1884-85	10.81
1885	2.79	.11	.28	1.89	1.69	.19	none	none	none	.39	4.36	1.20	16.70	1885-86	21.93
1886	6.44	2.52	4.18	2.36	.32	.16	none	none	none	none	.11	.61	19.39	1886-87	14.50
1887	39	6.44	4.41	1.90	.42	.22	.11	.04	.09	1.17	2.29	1.91	20.96	1887-88	17.76
1888	4.01	3.00	3.41	.58	.52	.03	none	none	none	.05	4.12	4.64	---	1888-89	* 17.79
1889	.93	1.50	6.55	---	---	---	---	---	---	---	---	---	---	---	---

* Up to April 1, 1889.

Weather Summary for San Bernardino.

The following summary of the weather for January, February and March, 1889, was furnished by Mr. A. K. Holt, editor of the "Times-Index," and also Voluntary Observer Signal Service, U. S. Army:

Summary for January.

Highest barometer.....	30.10
Lowest barometer.....	29.35
Mean barometer.....	29.84
Highest temperature.....	76.50
Lowest temperature.....	33.00
Mean temperature.....	52.30
Mean humidity	69.00
Total rainfall.....	.93
Number of days on which rain fell.....	4
Number of days totally clear.....	21
Number of days totally cloudy.....	2

Summary for February.

Highest barometer.....	30.10
Lowest barometer.....	29.41
Mean barometer.....	29.86
Highest temperature.....	81.50
Lowest temperature.....	33.50
Mean temperature.....	57.60
Mean humidity	65.80
Total rainfall.....	1.50
Number of days on which rain fell.....	4
Number of days totally clear.....	21
Number of days totally cloudy.....	0

Summary for March.

Highest barometer.....	30.18
Lowest barometer.....	29.43
Mean barometer.....	29.85
Highest temperature.....	82.50
Lowest temperature.....	45.50
Mean temperature.....	59.64
Mean relative humidity.....	76.57
Total rainfall.....	6.55
Number of days on which rain fell.....	6
Number of days totally clear.....	15
Number of days totally cloudy.....	0

The rainfall for season of 1888-89 to April 1 is as follows:

October.....	.05
November.....	4.12
December.....	4.64
January.....	.93
February.....	1.50
March.....	6.55
Total.....	17.79

Table Showing Average Temperature and Rainfall.

STATIONS.	Elevation—Feet	Average Winter Temperature	Average Spring Temperature	Average Summer Temperature	Average Autumn Temperature	Average Annual Temperature	Highest Temperature	Lowest Temperature	Average Seasonal Rainfall—Inches.
Riverside.....	.....	50.4	64.1	73.7	65.7	63.5	105	25	8.16
Colton.....	965	52.0	62.7	78.3	65.3	64.6	116	20	9.84
Daggett.....	2,010	47.9	57.8	84.3	71.0	65.2	104	20	3.98
Fenner.....	2,095	51.2	70.7	88.0	70.6	70.1	112	22	7.47
Needles.....	485	51.7	69.1	87.7	72.0	70.1	114	26	6.27
King's Station.....	4,300	41.0	49.8	65.3	54.8	52.7	99	12	22.49

YEARLY SUMMARY OF THE WEATHER AT SAN DIEGO.

Furnished by SERGEANT HEARN, Observer Signal Corps.

Annual mean barometer corrected for temperature only, 29.915 inches; highest, 30.33; lowest, 29.62 inches.

Annual mean temperature, 61.2°; mean maximum, 67.9°; mean minimum, 55.7°; annual mean dew point, 55.5; annual mean relative humidity, 82.6 per cent; annual mean cloudiness, 5.2; total precipitation, 11.57 inches. Total annual velocity of wind, 46.339 miles; prevailing direction of wind during the year, northwest. Total clear days, 152; fair, 97; cloudy, 117; rainy, on which the precipitation was appreciable, 51; maximum temperature above 90° during the year, 1; thunder and lightning storms, 3.

Rainfall at San Diego, San Diego County.—This table runs from November 1, 1871, to date. The figures are from the annual reports of the Chief Signal Officer. They show the rainfall by calendar years and seasonal years; also, the totals and averages by months:

Year.	January.	February.	March.	April.	May.	June.	July.	August.	Septem-ber.	October.	Novem-ber.	Decem-ber.	Total for Year.	Season of.	Total for Season.
1871												1.39	5.05	1871-72	6.04
1872	.99	1.63	.46	.26	.12	none	none	.18	none	none	none	1.41	5.05	1871-72	6.04
1873	.34	4.15	.11	.10	.01	none	none	1.95	none	none	none	5.46	12.89	1872-73	6.30
1874	3.11	3.73	1.20	.35	.32	none	.12	none	.04	.53	.88	.55	10.83	1873-74	16.89
1875	2.38	.37	.45	.12	.20	.02	none	.21	.39	none	2.25	.41	6.80	1874-75	5.66
1876	2.47	2.44	1.78	.06	.05	.05	.03	.06	.03	.08	.04	.15	7.24	1875-76	10.11
1877	1.05	.23	1.44	.26	.43	none	none	none	none	.81	.06	3.89	8.17	1876-77	3.80
1878	1.45	4.83	1.41	2.91	.58	.16	none	none	none	.96	none	1.57	13.87	1877-78	16.10
1879	3.54	1.04	.10	.60	sprin.	.07	none	none	none	.29	2.77	6.30	14.71	1878-79	7.88
1880	.61	1.50	1.43	1.34	.06	.06	.09	.32	none	.53	.28	4.15	10.37	1879-80	14.36
1881	.52	.45	1.88	1.35	.04	.05	none	.01	.04	.24	.12	.30	5.00	1880-81	9.66
1882	4.53	2.55	1.02	.45	.18	.07	none	none	.01	.41	.39	.13	9.74	1881-82	9.51
1883	1.09	.95	.41	.31	1.14	.08	none	none	none	2.01	.20	1.82	8.01	1882-83	4.92
1884	1.34	9.05	6.23	2.84	2.17	.31	none	none	.07	none	.11	4.83	26.95	1883-84	25.97
1885	.35	.02	.78	1.20	.61	.06	sprin.	.13	sprin.	.31	1.56	.70	5.72	1884-85	8.03
1886	7.00	1.50	3.73	1.95	.04	.07	sprin.	sprin.	none	.05	.95	.10	15.39	1885-86	16.99
1887	.04	4.51	.02	2.14	.47	.04	.01	sprin.	sprin.	sprin.	2.08	1.14	10.72	1886-87	8.32
1888	1.96	1.48	2.79	.10	.22	.04	.01	sprin.	.04	.26	1.83	2.84	11.57	1887-88	9.82
1889	1.72	1.80												1888-89	*8.50

*Up to March 1, 1889.

SUMMARY FOR APRIL, 1889.

SIGNAL SERVICE, U. S. ARMY,)
 DIVISION OF THE PACIFIC,)
 SAN FRANCISCO, CAL., May 1, 1889.)

The month has been marked by the absence of storms accompanied by dangerous winds. Copious showers have fallen during the month in Oregon, Washington, and Northern California, and light showers in Southern California.

The temperature has been much higher than usual in all districts.

The following table shows the distribution of the rainfall for the month and season up to May 1, 1889:

STATIONS.	Normal for April.	Total for April, 1889.	Average for Season to May 1st.	Total for Season to May 1, 1889.
Olympia, Washington	3.80	1.88	52.98	29.83
Walla Walla, Washington	1.61	1.51	14.18	9.25
Portland, Oregon	3.43	2.66	46.85	24.88
Roseburg, Oregon	3.10	1.56	32.25	18.00
Winnemucca, Nevada	1.16	.06	7.41	2.56
Red Bluff, California	2.82	1.01	23.10	20.18
Chico, California	1.63	.97	17.99	18.01
Willows, California	1.90	.27	10.98	12.40
Orland, California	1.79	1.02	13.12	12.90
Davisville, California	1.74	1.17	15.02	18.41
Colfax, California	5.34	3.25	41.81	30.25
Sacramento, California	3.28	.24	20.54	16.21
Napa, California	2.99	1.67	22.22	20.39
Santa Rosa, California		1.09		20.60
San Francisco, California	2.38	.97	23.09	21.66
Livermore, California	1.44	.51	13.10	13.44
Lathrop, California	1.82	.33	10.07	10.40
Folsom, California	2.59	.48	21.76	19.32
Niles, California	1.68	.92	16.28	14.19
Salinas, California	1.52	.82	12.87	10.69
South Vallejo, California	1.89	.73	13.05	14.99
San José, California	1.62	.79	12.32	14.71
San Mateo, California	2.19	.84	17.97	18.93
Santa Cruz, California	3.47	.84	23.91	21.57
Menlo Park, California	2.23	.69	13.62	14.92
Livingston, California		.10		9.34
Anaheim, California	1.22	1.04	10.29	15.80
Merced, California	1.53	.20	10.11	7.03
Modesto, California	1.14	.19	8.76	7.72
Fresno, California	2.15	.52	9.58	7.05
Delano, California	1.17	.12	4.92	5.62
Antioch, California	1.45	.46	10.49	11.92
Athlone, California		.77		3.30
Bakersfield, California	.95	.15	4.67	4.66
Gilroy, California	2.05	.63	18.64	12.41
Selma, California		.47		6.65
Tulare, California	1.11	.66	6.39	7.16
Turlock, California	1.76	.17	8.88	7.77
Los Angeles, California	2.17	.24	17.01	18.98
Newhall, California	1.82	.43	14.26	20.93
San Diego, California	1.01	.15	9.31	10.78
Keeler, California	.51	.12	2.92	5.18
Yuma, Arizona	.11	.00	2.65	4.15

RAINFALL, TEMPERATURE, AND CLEAR DAYS FOR THE SOUTHERN STATES AND PACIFIC COAST.

The tabulated matter in the following tables was taken from the Chief Signal Officer's annual report for the year 1886, and gives the average yearly rainfall, average winter, spring, summer, and autumn temperatures, also the average annual temperature, the highest and lowest temperature, and the average annual number of clear days for the Southern States, Arizona, California, Oregon, and Washington Territory. The States represented in this table are Virginia, North and South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Arkansas, Tennessee, Kentucky, Missouri, and Texas, Arizona, and Washington Territories, and California and Oregon. California stands ahead of all the Southern States in its having more clear days and a higher minimum temperature than any point in the south except Key West, Florida. This table will be found valuable because it represents such a great number of points in all the Southern States except Maryland and Delaware:

AVERAGE TEMPERATURE, CLEAR DAYS, AND RAINFALL, FOR THE SOUTHERN STATES.

STATES AND STATIONS.	Average Rain- fall	Average Winter Temperature	Average Spring Temperature	Average Summer Temperature	Average Fall Temperature	Average Annual Temperature	Highest Tem- perature	Lowest Tem- perature	Average Annual No. Clear Days.
<i>Virginia:</i>									
Norfolk	51.61	42.2	57.0	77.3	60.7	59.3	102.5	6.0	121.3
Lynchburg	42.21	38.8	56.1	76.3	57.7	57.6	101.8	*5.0	131.6
<i>North Carolina:</i>									
Charlotte	54.47	43.8	59.6	77.1	61.5	60.6	101.0	*5.0	108.5
Hatteras	73.61	46.4	57.1	76.6	66.4	61.8	92.0	8.0	97.8
Kitty Hawk	65.55	43.8	55.4	76.1	63.3	59.8	100.0	8.0	125.5
Fort Macon	59.16	47.3	58.8	77.2	66.0	62.4	91.0	8.5	100.4
Smithville	50.84	48.4	61.6	79.0	65.2	63.5	100.0	6.0	121.5
Wilmington	57.79	48.2	62.0	78.5	64.0	63.1	103.0	9.0	124.4
Asheville	40.20	37.9	53.5	70.7	53.5	53.9	90.0	*1.0	-----
<i>South Carolina:</i>									
Charleston	59.92	51.2	65.0	81.0	66.8	66.2	104.0	13.0	132.5
Aiken	-----	45.8	61.3	77.4	62.0	61.6	102.0	3.0	-----
<i>Georgia:</i>									
Augusta	49.43	48.8	64.2	80.2	64.5	64.7	105.0	7.0	126.8
Savannah	52.70	52.9	66.6	81.1	66.9	67.1	105.0	15.0	118.2
Atlanta	56.08	46.1	61.3	76.5	62.4	61.7	97.5	*1.3	114.8
<i>Florida:</i>									
Jacksonville	54.70	56.8	69.1	81.4	69.9	69.5	104.0	19.0	124.0
Cedar Keyes	55.86	60.1	70.3	81.7	72.4	71.1	96.0	22.0	162.0
Key West	40.31	70.8	76.9	83.8	78.8	77.7	97.0	44.0	114.8
Sanford	45.72	61.6	71.6	80.5	73.3	71.8	99.4	28.5	131.0
Pensacola	67.31	56.0	67.9	80.3	69.5	68.4	97.2	16.3	128.2
<i>Alabama:</i>									
Mobile	65.47	52.6	67.2	81.2	67.7	67.2	101.0	13.9	127.8
Montgomery	53.15	50.4	65.3	80.6	65.5	65.6	106.9	8.0	118.0
<i>Mississippi:</i>									
Vicksburg	61.06	50.4	66.0	80.8	65.5	65.7	101.0	10.0	124.0
<i>Louisiana:</i>									
New Orleans	64.29	56.0	69.0	81.9	69.9	69.4	97.0	20.0	111.9
Shreveport	53.62	48.9	66.1	81.9	65.2	65.7	107.0	6.0	126.1
<i>Arkansas:</i>									
Fort Smith	45.80	37.7	59.4	77.7	62.8	59.5	104.5	*5.0	128.4
Little Rock	59.27	45.3	62.3	78.8	63.1	62.3	102.0	5.5	146.6
<i>Tennessee:</i>									
Chattanooga	59.85	44.2	60.1	76.2	61.3	60.4	101.0	*1.0	117.3
Knoxville	53.88	39.7	57.2	74.8	57.7	57.5	100.0	*16.0	117.4
Memphis	55.97	42.7	61.3	79.5	60.9	61.2	102.0	*2.0	124.3
Nashville	52.10	41.2	59.7	78.5	59.7	59.8	104.0	*10.0	100.9
<i>Kentucky:</i>									
Louisville	48.53	37.2	55.7	76.7	57.6	57.0	104.6	*19.0	104.3
<i>Missouri:</i>									
St. Louis	37.73	34.1	54.7	76.7	56.3	55.4	106.4	*21.0	119.1
<i>Texas:</i>									
Galveston	53.01	55.5	69.9	83.5	71.4	70.2	98.5	18.0	124.6
Indianola	37.62	55.6	70.4	82.8	71.5	70.1	100.0	14.0	124.2
Palestine	50.11	48.6	65.5	79.9	67.1	65.0	98.2	6.5	129.8
Brownsville	32.93	60.4	74.3	83.5	73.6	72.8	102.0	18.0	119.5
Rio Grande City	21.98	60.3	76.0	85.2	73.3	73.4	112.0	19.0	156.1
Fort Elliott	23.81	33.7	54.8	74.4	55.4	54.6	102.0	*12.0	183.8
Fort Concho	30.11	45.6	65.1	80.7	63.2	63.6	110.0	*1.0	162.7
Fort Davis	20.33	45.5	61.3	74.0	59.3	59.8	111.0	Zero.	199.2
Fort Stockton	19.21	46.0	64.3	79.2	62.0	62.8	107.4	2.0	203.0
El Paso	12.50	47.2	64.0	80.6	62.2	63.2	113.0	*5.0	223.6

* Below zero.

ARIZONA, CALIFORNIA, OREGON, AND WASHINGTON TERRITORY—MEAN AVERAGE TEMPERATURE, CLEAR DAYS, AND RAINFALL.

STATES AND STATIONS.	Average Rain- fall	Average Winter Temperature.	Average Spring Temperature.	Average Summer Temperature.	Average Fall Temperature.	Average Annual Temperature.	Highest Tem- perature	Lowest Tem- perature	Average Annual No. Clear Days.
<i>Arizona Territory:</i>									
Fort Apache	23.70	36.1	50.5	69.6	52.4	52.0	102.5	*9.0	207.5
Fort Grant	16.91	44.4	58.7	76.2	60.9	60.0	103.0	10.0	203.5
Prescott	15.40	35.4	49.4	69.7	52.2	52.1	103.0	*18.0	234.8
Camp Thomas	11.73	43.4	60.4	80.7	60.1	61.4	112.5	10.0	204.3
Yuma	2.53	56.1	70.2	89.6	73.9	72.0	118.0	22.0	279.9
<i>California:</i>									
San Diego	10.81	54.6	58.1	66.8	62.6	60.5	101.0	32.0	122.3
Los Angeles	17.95	53.6	58.4	67.8	62.7	60.5	108.0	28.0	171.3
San Francisco	24.11	51.3	54.6	58.5	58.2	55.7	95.2	33.0	146.7
Sacramento	19.94	48.3	59.5	71.7	61.5	60.2	106.0	19.0	240.0
Red Bluff	27.45	46.8	59.8	79.7	63.2	62.4	110.5	19.0	227.7
Cape Mendocino	18.50	46.7	49.1	54.5	53.9	51.2	90.0	28.5	165.0
<i>Oregon:</i>									
Roseburg	35.48	41.0	51.2	64.1	51.7	51.9	97.2	3.3	103.4
Portland	52.99	40.6	51.6	64.4	52.8	52.4	99.0	3.0	87.3
<i>Washington Territory:</i>									
Olympia	59.14	38.8	48.5	60.7	49.4	49.2	95.0	2.0	64.1
Fort Canby	45.98	40.4	49.3	58.2	52.8	50.2	90.3	16.0	101.6

* Below zero.

THE FOUR CITRUS BELTS OF THE NORTHERN HEMISPHERE.

The following tables show the temperature at places situated in the four recognized citrus belts of the northern hemisphere, and certainly the Central California citrus belt has no cause to complain of being colder, or its climate less equable than the other so called citrus regions. Take Northern Italy, the portion along the northern shores of the Mediterranean Sea has about the same climate, but the towns are running in opposition to each other as health and winter resorts, for which reason their reported minimum temperatures should be looked upon with some discredit. No doubt the low temperature recorded at Cannes is a fair sample of what it is. From that place to Genoa on the east, 20° is recorded as the lowest. In all probability 2° less than that would be nearer the mark. The winter temperature of any place in Central California in the following table will beat the Italian citrus climate.

Now take Florida. We find that Jacksonville and Pensacola have high annual and winter temperatures; but look at their minimum of 19° and 16°, respectively. If citrus fruits can stand that temperature in Florida without serious damage, what is to hinder the same kind of fruit in the central citrus belt of California from pushing ahead? Here they have never recorded as low a temperature as Pensacola. Take the citrus belt of Southern California. Look at the minimum temperature at Poway, San Diego County—21° in 1878 and 1881. In all probability it went as low as 18° during the passage of the cold wave of January, 1888. Poway, Los Angeles, and Riverside have exactly the same winter temperature as Marysville and Nicolaus, and 2° lower than Oroville. Riverside is reported to have had a minimum temperature of 17°. (See "Bee" of January 18, 1888, letter from W. G. Williams, of Loomis, Placer County.) Los Angeles must have had a temperature of at least 20° during our past cold spell, although her record before this was 23° as the lowest.

From these tables a great deal of information on the temperature of the four citrus belts can be learned. The yearly and winter temperature in Florida goes to show that one cannot judge understandingly of a climate for citrus fruits unless he knows the actual minimum or lowest temperature that occasionally sweeps over such semi-tropic belts. The tables are as follows:

ITALIAN CITRUS BELT.

PLACES.	Average Yearly Temperature.	Average Winter Temperature.	Average Temperature Coldest Month.	Lowest Temperature.
Naples	61.3	48.5	47.0	-----
Rome	60.7	48.9	45.0	-----
Florence	58.8	44.3	44.0	-----
Pisa	60.4	46.4	45.8	-----
Genoa	60.4	44.9	44.0	-----
San Remo	60.1	48.9	48.0	23.0
Mentone	60.9	49.0	48.7	23.0
Nice	59.5	47.8	40.9	-----
Cannes	59.9	49.6	48.8	20.0

TRANSACTIONS OF THE

SEMI-TROPIC FLORIDA.

PLACES.	Average Yearly Temperature.	Average Winter Temperature.	Average Temperature Coldest Month.	Lowest Temperature.
Jacksonville	69.5	58.7	57.4	19.0
Pensacola	68.4	55.7	54.1	16.0
Sandford	71.0	58.0	55.0	28.0

SOUTHERN CALIFORNIA CITRUS BELT.

PLACES.	Average Yearly Temperature.	Average Winter Temperature.	Average Temperature Coldest Month.	Lowest Temperature.
Poway	59.3	50.2	48.4	21.0
Riverside	61.0	50.4	49.7	* 17.0
Los Angeles	60.5	50.0	52.0	23.0
Santa Barbara	61.1	54.0	52.9	30.0

*See letter of W. G. Williams, in "Sacramento Bee," January 18, 1888.

THE GREAT CITRUS BELT OF THE SACRAMENTO VALLEY.

PLACES.	Average Yearly Temperature.	Average Winter Temperature.	Average Temperature Coldest Month.	Lowest Temperature.
Sacramento	60.2	48.3	47.0	18.0
Auburn	59.7	46.2	44.0	18.0
Colfax	59.5	46.0	43.1	18.0
Nicolaus	62.0	50.9	47.0	18.0
Marysville	64.2	50.0	48.7	18.0
Princeton	62.8	48.2	47.0	18.0
Oroville	64.9	52.0	49.4	20.0
Chico	63.8	47.0	44.6	18.0
Red Bluff	62.4	46.8	45.2	18.0
Redding	63.8	47.8	45.4	18.0

The above table shows the average yearly temperature, average winter temperature, average temperature of the coldest month, and the lowest recorded temperature known. The lowest in the great citrus belt of the Sacramento Valley is taken generally from the extraordinary cold spell of January sixth to eighteenth, being the second cold spell in forty years for our valley and State.

Menlo Park	45.8	52.5	51.4	59.0	60.4	67.0	70.2	69.5	66.7	61.7	55.2	53.1	59.4	101	20
Merced	47.1	54.6	54.2	65.9	69.3	76.3	83.4	83.0	77.7	68.5	58.0	50.8	65.7	120	19
Modesto	44.2	50.8	54.4	66.2	66.1	73.4	80.9	86.6	80.7	64.7	52.7	50.4	64.3	110	13
Mojave	43.7	52.1	53.7	71.0	67.6	73.1	81.2	85.3	93.9	69.4	58.4	51.8	66.8	115	16
Montague	49.8	49.9	61.9	65.4	65.6	73.3	81.2	85.9	74.3	61.9	44.1	40.4	61.8	104	16
Monterey	49.7	54.8	54.6	57.5	60.0	64.8	64.6	63.1	62.5	59.5	53.7	55.2	58.2	90	20
Napa	44.6	49.5	51.8	56.4	60.4	69.8	69.3	67.2	65.8	60.4	52.7	51.0	58.2	100	21
Newark	45.5	50.9	54.9	65.1	64.0	71.5	77.6	68.6	68.4	65.0	58.1	53.6	62.7	108	14
Newhall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Newman	—	50.5	54.8	61.7	63.9	66.3	73.3	68.4	66.7	63.0	62.5	55.2	57.2	101	—
Niles	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Norwalk	47.4	52.6	51.0	57.6	57.0	62.9	62.5	61.4	60.8	69.1	54.2	52.1	56.6	80	28
Oakland	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ontario	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Orland	44.5	54.8	53.9	69.0	70.7	75.3	85.1	85.5	84.3	74.8	57.5	51.1	67.2	115	22
Pajaro	47.1	53.1	52.1	56.0	58.3	63.1	63.5	61.4	62.3	60.8	55.6	55.8	57.4	89	20
Paso Robles	44.1	47.8	51.9	62.3	64.0	71.7	73.5	74.4	71.0	60.4	51.3	47.9	60.0	108	13
Petaluma	44.2	50.8	49.0	57.3	57.8	61.2	68.2	67.3	65.0	65.0	55.1	51.3	57.7	97	18
Placerville	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pleasanton	48.1	53.7	54.9	61.8	63.4	69.8	74.7	75.7	71.4	57.9	49.9	46.8	62.3	103	22
Pomona	—	—	—	—	—	—	—	—	—	—	—	—	—	104	—
Porterville	—	—	—	—	—	—	—	90.5	81.4	72.0	57.0	50.1	70.2	—	—
Puerto	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Red Bluff	40.9	53.9	54.5	67.0	68.1	70.7	80.9	83.6	81.2	68.2	54.8	48.3	64.3	109	18
Redding	39.2	52.4	55.3	69.6	74.2	72.5	83.0	80.9	81.5	66.4	48.5	53.9	64.8	106	18
Rocklin	42.7	49.8	52.5	59.7	64.0	70.2	79.9	82.1	78.4	66.8	55.0	48.5	62.5	106	20
Rumsey	—	—	—	—	—	—	—	84.1	84.6	82.4	70.9	56.2	50.8	110	—
Sacramento	42.8	52.6	53.6	62.3	61.8	67.7	71.6	75.4	73.7	64.2	53.6	48.4	60.6	108	19
Salinas	44.1	49.7	48.6	56.2	58.1	68.4	66.2	60.3	59.3	57.3	50.8	52.2	55.9	87	21
Sanger Junction	—	—	—	—	—	—	—	89.2	84.1	72.5	59.6	51.2	71.3	—	—
San Ardo	44.6	50.8	52.0	60.0	62.7	70.1	69.4	69.9	70.5	62.0	54.9	51.9	59.9	111	20
San Diego	51.6	54.9	55.8	60.8	61.2	65.9	68.4	68.4	68.2	63.5	58.8	56.5	61.2	93	33
San Fernando	44.6	52.4	55.6	69.5	62.1	75.1	76.4	74.9	76.7	68.2	58.6	55.1	64.1	108	28
San Francisco	46.3	52.8	52.5	56.2	55.4	63.0	59.1	57.8	59.0	58.6	55.1	52.4	55.5	93	29
San Gabriel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
San José	46.4	52.6	52.8	58.3	59.8	65.2	66.8	68.6	68.0	62.3	56.5	52.9	59.2	93	22
San Mateo	46.5	51.2	51.7	58.3	58.2	67.1	69.7	66.7	62.8	58.1	49.3	50.6	57.5	92	26
San Miguel	43.2	52.5	54.5	61.2	62.2	69.5	76.2	73.2	70.5	62.5	54.4	50.9	60.4	106	17
San Pedro	—	—	—	—	—	—	76.2	77.3	75.0	69.2	62.1	59.1	69.8	90	—
Santa Ana	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Barbara	48.4	56.1	54.8	62.6	62.8	70.7	72.5	69.0	65.0	65.0	59.6	55.8	62.4	82	30
Santa Cruz	49.2	53.1	54.8	59.3	59.3	67.5	66.4	64.4	65.8	66.3	58.0	57.1	60.1	98	24
Santa Monica	56.8	58.0	57.2	65.3	64.0	68.0	76.7	74.6	72.6	67.8	60.5	55.8	64.8	91	39
Santa Paula	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	71.7	70.5	67.3	62.6	59.8	65.7	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Santa Rosa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

California's Rainfall for 1888.—The rainfall for each month of the year 1888, in California, from the records of the Southern Pacific Railroad Company, voluntary observers, military posts, and from those of the Signal Service Station not otherwise accounted for in this publication:

STATIONS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.	Normal or Average Precipitation.
Crescent City	22.46	3.52	5.86	1.42	1.04	7.30	.02	.00	.00	.08	2.47	2.99	58.40	83.45
Crescent City	22.46	3.25	4.55	3.13	.65	6.49	.00	.00	.00	2.04	4.92	7.19	54.68	20.20
Fort Bidwell	12.58	1.81	3.28	.16	1.50	2.38	.34	.04	.33	.63	.16	.16	14.11	45.69
Fort Gaston	12.39	5.18	4.32	.70	1.18	4.20	.30	.00	.00	.61	2.08	4.55	35.70	33.59
Humboldt	12.39	1.30	3.79	.65	.85	4.22	.37	.00	.04	.89	2.84	6.20	33.52	40.79
Eureka	12.95	1.98	4.09	1.05	.76	4.66	.44	T.	.06	1.15	3.41	5.73	36.48	13.62
Upper Matole	41.63	4.13	8.96	1.51	.48	4.19	.11	T.	.00	1.06	4.86	7.43	80.55	14.65
Redding	9.35	2.70	2.95	.00	.73	3.52	.00	.00	.45	.00	.00	.00	23.94	19.44
Tehama	4.70	2.40	4.10	.25	.25	.30	.00	.00	.00	.00	3.61	8.33	14.65	19.31
Corning	3.64	2.09	3.20	.19	.40	.79	T.	.00	.52	.00	3.34	5.37	16.27	11.77
Chico	4.15	1.15	1.94	.15	.00	1.20	.00	.00	.68	.00	4.49	5.35	16.27	11.77
Orland	4.11	1.56	2.73	.57	.24	.53	.00	.00	.00	.00	2.79	3.47	16.27	11.77
Williams	2.22	.70	1.72	.00	.67	.08	.04	.02	.30	.00	4.10	2.67	12.72	27.17
Westport	16.61	2.04	4.83	.73	.79	5.61	.22	T.	.40	.22	.00	.00	29.51	23.70
Point Arena	11.41	1.29	2.95	.25	.75	2.70	.36	.00	.54	.15	3.33	5.78	47.94	51.96
Truckee	3.43	12.50	.16	.00	2.04	.37	.40	T.	.00	.00	.00	4.80	35.27	32.40
Emigrant Gap	17.05	3.92	5.42	3.30	2.33	3.04	.62	.00	.10	.00	4.77	7.39	21.28	21.16
Colfax	13.28	2.18	3.80	.95	.17	2.69	.00	.00	.25	.10	3.28	9.57	16.07	16.55
Auburn	7.07	1.40	3.25	.80	.40	1.55	.00	.00	.00	.00	4.20	5.82	18.73	17.75
Rocklin	4.39	.76	2.05	.00	.53	?	.05	.00	.00	.00	2.73	3.94	15.05	16.07
Dunnigan	4.18	1.03	3.39	.00	1.62	.00	.00	.00	.59	.00	5.88	4.39	21.28	16.55
Davis	4.23	1.10	2.80	.30	.50	.00	.00	.00	.65	.00	5.06	4.10	18.73	17.75
Knights Landing	4.18	.91	2.51	.07	2.45	.34	.02	.00	.81	.00	6.14	6.91	31.94	31.00
Calistoga	7.87	2.87	5.64	.26	.20	1.16	.00	.00	.89	.00	2.96	5.30	20.66	23.25
Napa	4.87	1.33	4.18	.88	.65	.00	.00	.00	.49	.00	5.02	8.30	27.55	25.82
Sonoma	5.78	.70	4.55	.19	1.42	.00	.00	.00	.86	.00	4.37	5.83	19.77	21.83
Petaluma	3.72	2.10	4.85	.36	1.00	.30	.00	.00	1.24	.00	2.99	2.48	17.63	19.34
Yone	4.60	5.12	1.16	.70	.22	.00	.00	.00	.36	.00	3.94	8.29	21.79	15.72
Brighton	4.67	.62	2.86	.30	.50	?	.00	.00	.52	.00	3.87	3.14	16.64	15.34
Galt	3.97	.46	3.14	.40	.39	.35	.00	.00	.92	.00	.28	4.47	15.69	16.51
Elmira	4.81	1.49	3.92	.00	.45	.19	.00	.00	.08	.00	3.88	4.48	19.86	18.32
Suisun	4.30	1.58	3.97	.65	.30	.00	.00	.00	.70	.00	3.12	3.01	13.53	14.90
South Vallejo	4.52	1.47	.62	.00	.45	.16	.00	.00	.40	.00	2.92	3.82	18.99	15.94
Benicia Barracks	5.84	.47	4.32	.04	.33	.38	.01	.00	.90	.00	2.84	4.61	15.74	22.66
Angel Island	5.36	.30	1.18	.04	.13	.13	.00	.00	1.15	.00	5.52	6.73	28.92	25.09
Point Bonita Lighthouse	6.96	1.46	3.85	.28	.63	.45	.00	.00	1.94	.40	3.06	2.91	16.30	16.75
Martinez	4.24	1.65	3.54	.00	.10	.15	.00	.00	.65	.00	.00	.00	16.30	16.75

STATIONS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.	Normal or Average Precipitation.
Antioch	2.84	1.24	2.05	.00	.50	.00	.00	.00	.70	.00	1.82	2.88	12.03	11.07
Brentwood	4.24	.40	2.28	.02	.59	.00	.00	.00	.82	.00	3.71	1.72	13.78	11.05
East Brother Lighthouse	2.15	.24	.87	.00	.05	.06	.00	.00	.70	.00	3.40	2.50	9.97	7.31
Byron	2.67	1.25	1.77	.00	.75	.00	.00	.00	.59	.00	4.49	1.81	13.33	12.11
Walnut Creek	4.35	.90	.65	.08	.00	.00	.00	.00	.34	.00	3.00	2.34	11.72	
Niles	4.10?	.30	2.83	.23	.60	.50	.00	.00	.42	.00	3.70	2.30	14.98	17.05
Livermore	3.20	.94	2.54	.60	.30	.00	.00	.00	.64	.00	3.80	2.21	14.89	13.69
Pleasanton	3.23	.88	2.25	.20	.50	.27	.00	.00	.62	.00	5.15	1.85	14.95	17.85
Centerville	3.99	1.15	3.07	.15	.78	.40	.00	.00	.39	.07	3.87	2.53	17.05	16.15
Berkeley	5.84	1.92	4.50	1.95	.42	.43	.05	.00	.59	.02	2.71	3.79	22.22	
Stockton	3.00	.58	1.74	.55	.54	.00	.00	.00	.31	.00	2.66	2.71	12.09	11.96
Farmington	3.82	.15	3.52	.07	.92	.00	T.	.00	.66	.00	2.93	1.75	13.82	14.78
Tracy	1.99	.84	.61	.00	.54	.19	.00	.00	.35	.00	2.85	1.71	9.08	9.15
Lathrop	2.46	.41	1.09	.49	.72	.00	.00	.00	.78	.00	2.60	3.21	11.76	11.44
LaGrange	2.84	.66	2.63	.17	.52	T.	.04	T.	.32	.00	3.29	3.07	14.14	16.21
Modesto	1.72	.53	1.36	.25	.69	.10	.00	.00	.51	.00	1.86	1.40	8.42	9.90
Turlock	2.19	.19	1.11	.18	.52	.00	T.	.00	.82	.00	2.75	1.38	9.04	9.53
Farallone Islands	3.20	.53	2.59	.00	.05	.16	.00	.00	.35	.05	3.30	4.36	14.79	17.91
Yerba Buena Lighthouse	5.10	1.29	2.92	.00	.41	.05	.00	.00	.06	.00	2.47	3.13	15.43	16.95
San Mateo	4.75	1.21	3.97	.13	.67	.08	.00	.00	1.03	.00	4.16	4.04	20.02	22.75
Menlo Park	3.17	1.36	2.31	.02	.37	.09	.00	.00	.98	.00	3.72	2.39	14.61	14.42
Point Montara Lighthouse	5.63	1.56	4.59	.01	.43	.53	.00	.00	.95	.21	4.30	6.19	23.49	23.49
Pigeon Point Lighthouse	5.49	1.04	3.80	.00	1.52	.26	.00	.00	.00	.00	4.55	4.25	24.40	16.22
Año Nueva Lighthouse	7.22	.84	4.72	.08	.98	.30	.00	.00	.05	.00	4.55	4.25	22.99	21.10
Santa Cruz	8.00	1.93	4.61	.57	1.08	.09	.00	.00	.37	.00	6.17	5.07	27.89	24.87
Aptos	5.85	1.59	5.32	.50	.79	.25	.00	.00	.45	.00	5.75	5.17	24.81	21.47
San José	3.06	1.06	3.00	.31	.60	.22	.00	.00	.60	.00	3.88	2.44	15.17	15.35
Gilroy	5.35	.77	3.92	.40	.44	.00	.00	.00	.32	.00	3.71	2.10	17.01	19.18
Los Gatos	5.73	1.47	6.74	.07	1.00	.38	.00	.00	.59	6.19	3.88	4.10	30.45	
Santa Clara	3.08	1.18	3.10	.12	1.28	.18	.00	.00	.57	.00	4.37	3.00	17.39	13.93
Evergreen	2.61	1.44	3.32	.08	.81	.24	.00	.00	.58	.00	2.82	2.07	13.96	
Merved	1.50	.15	1.68	.28	.65	.10	.00	.00	.50	.00	2.40	2.12	9.38	10.73
Los Banos	1.83	.06	1.33	.00	.19	T.	.00	.00	.60	.00	2.99	1.92	8.92	7.23
Livingston	2.79	.29	2.57	.26	.22	.00	.00	.00	?	.00	3.80	2.10	12.03	8.10
Athlone	2.29	.15	1.70	.30	.60	.00	.00	.00	.25	.00	2.56	1.59	10.10	9.49
Lemoore	1.89	.00	1.28	.00	.88	.00	.00	.00	.00	.00	2.04	.96	7.05	9.05
Kingsburg	2.29	.29	1.64	.00	.21	.00	.00	.00	.08	.00	1.78	1.83	8.12	8.90
Selma	2.40	T.	1.57	.10	.31	.00	.00	.00	.10	.00	1.46	1.88	7.82	7.78

Bishop Creek	1.25	.47	.92	.05?	.00	.35	.20	.00	.00	.00	1.72	.40	5.69	2.91
Keeler	.70	1.21	.30	.12	.30	.20	.17	.10	.06	.00	1.68	.82	5.06	3.67
Hollister	2.61	.97	2.75	.40	.80	.02	.00	.00	.20	.00	2.20	2.00	11.95	11.52
Monterey	3.85	1.09	3.29	.23	.81	.09	.09	.00	.65	.00	1.76	2.76	14.54	14.45
Soledad	2.85	.88	2.10	.15	.35	.00	.00	.00	.25	.00	2.03	1.73	10.35	8.75
Pajaro	4.59	.91	4.27	.47	.58	T.	.00	.00	.79	.00	3.29	2.80	17.70	18.13
Jolon	5.64	.16	4.81	.00	.37	.01	T.	.00	.60	.00	5.64	4.48	21.71	20.25
Traver				T.	.11	.00	.00	.00	.18	.00	2.33	2.20		
Goshen	2.11	.19	1.33	.12	.29	.00	.00	.00	.16	.00	1.12		7.57	7.75
Tulare	1.14	.19	1.14	.00	1.11	.00	.00	.00	.18	.00	1.66	1.38	6.81	6.77
Lewis Creek	4.09	.46	2.29	.10	.13	.00	?	.00	.07	.00	2.57	2.87	12.58	11.93
Templeton	6.05	.38	5.00	.32	.34	.04	.00	.00	.07	.00	4.53	3.20	19.93	
San Ardo	3.44	.28	2.91	.11	.27	.00	.00	.00	.00	.00	3.24	2.31	12.46	
Steeles	8.60	.49	3.44	.36	.46	.00	.00	.00	.05	.00	5.45	3.35	22.20	
Delano	2.21	.10	.94	.00	.15	.00	.00	.00	.00	.00	1.51	1.19	6.10	5.44
Caliente	.87	1.14	1.50	.00	.81	.00	.00	.00	.00	.00	1.33	2.18	7.83	10.67
Keene	1.30	1.70	2.69	.78	2.03	.00	.68	.00	.00	.00	1.28	2.29	12.75	13.32
Tehachapi	2.57	2.60	2.57	1.25	.25	.00	.00	.00	.00	.00	?	3.65		11.43
Mojave	2.61	1.50	1.75	.00	.00	.00	.00	.00	.00	.00	2.23	10.27	15.05	9.55
Colton	4.89	.42	3.68	.43	.00	.00	.00	.00	.00	.00	2.37	3.26	12.58	11.83
Ravenna	2.57	.82	3.19	.00	.00	.00	.00	.00	.00	.00	2.35	2.90	15.50	14.90
Newhall	6.74	1.17	4.21	.29	.04	.00	.00	.00	.00	.00	3.69	5.40	19.31	14.80
San Fernando	5.09	1.39	3.40	.44	.00	.00	.00	.00	.00	.00	3.23	6.47	24.11	18.55
Calatunga Valley	7.55	1.13	3.67	.15?	.08	.00	.00	.00	.00	.00	4.38	21.06		10.81
Anaheim	6.29	.92	5.90	T.	.00	.00	.00	.00	.00	.00	3.75	4.19		
Santa Monica	6.98	.00	6.95	.60	.00	.00	.00	.00	.00	.00	.58	6.49		
Spadra	6.23	.98	3.45	.00	.00	.00	.00	.00	.00	.00	2.5	150	15.89	12.27
Downey	5.33	.82	5.52	.11	.02	.00	.00	.00	.00	.00	2.94	4.75	19.50	12.77
Santa Maria	4.02	.43	2.55	.12	.14	T.	.00	.00	.00	.00	1.23	5.86	16.31	14.91
Point Conception	6.49	.90	3.65	.00	.00	.00	.00	.00	.00	.00	1.10	3.06	15.03	11.40
Indio	.75	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.11	2.96		1.90
Mammoth Tank	.05	.07	.05	.03	.01	.00	.40	.00	.00	.00	.73	.87	2.63	1.99
Elsinore	6.09	.80	.09	5.87	?	.00	.20	.00	.06	.69	2.93	5.37	22.10	

The following record shows the average rainfall for each month in the year, along with the yearly average, and the greatest amount that has ever been precipitated during any season, as also the least amount. This data is taken from a report published by General A. W. Greeley, the Chief Signal Officer, entitled "Rainfall in California, etc., for from Two to Forty Years." All stations in California will be found in the tabulated statement below, numbering over two hundred and forty different stations, and is valuable, because it is an average obtained from many years of observation:

NAME OF STATION.	January	February	March	April	May	June	July	August	September	October	November	December	Yearly Average.	Greatest Seasonal Precipitation.	Least Seasonal Precipitation.
Camp Lincoln	16.87	6.68	11.20	7.16	.92	3.15	.02	.05	.30	1.82	9.48	15.58	73.23	113.45	63.72
Grescent City	13.69	10.44	6.29	8.58	2.75	2.31	.65	.08	3.49	10.22	11.37	18.90	88.77	113.45	63.72
Fort Terward	9.97	8.78	4.51	6.07	3.63	.18	2.42	.71	4.57	4.52	12.71	11.52	69.59	22.48	10.53
Yreka	3.19	1.75	1.55	1.04	.83	.39	.26	.08	.37	1.46	1.77	2.52	15.21	22.48	10.53
Scott Valley	4.84	2.93	2.52	1.84	.98	.46	.49	.20	.50	1.24	3.15	4.96	24.11	40.96	13.05
Fort Jones	2.88	4.10	2.77	1.25	1.21	.69	.06	.07	.20	1.39	2.59	4.39	21.60	32.03	18.89
Berryvale	3.67	2.00	5.94	3.90	.30	.00	.00	.00	1.19	3.48	3.27	5.69	28.84	32.03	18.89
Almaden	1.52	8.60	.92	1.60	.00	.00	.00	.00	.20	.05	.60	.80	14.29	32.03	18.89
Fort Bidwell	4.24	2.71	2.25	1.68	1.37	1.13	.31	.20	.38	.96	2.08	3.46	20.77	37.20	12.24
Little Hot Springs	5.53	2.81	3.00	1.73	1.51	.76	.79	1.60	.00	2.81	4.45	2.14	27.13	125.36	31.72
Fort Gaston	10.56	7.99	7.50	4.70	1.74	.75	.12	.11	.89	2.67	7.69	10.70	55.42	125.36	31.72
Blue Lake	12.66	7.34	3.98	8.14	2.08	1.04	.47	T	2.08	1.91	16.68	20.08	76.46	125.36	31.72
Aracata	5.85	6.07	3.08	7.38	1.32	.00	.00	.00	.00	3.19	1.77	9.03	37.69	125.36	31.72
Fort Humboldt	5.78	5.96	5.30	2.82	1.24	.47	.19	.07	.58	1.78	4.13	7.59	35.91	47.43	23.11
Humboldt Lighthouse	6.28	4.64	4.46	3.56	1.08	.36	.03	.04	.62	2.07	4.04	5.84	33.02	48.76	20.62
Hydesville	5.91	3.76	3.47	5.73	.93	.54	.14	.01	.87	1.69	5.68	8.42	37.15	55.70	26.81
Cape Mendocino	2.68	1.89	1.90	3.15	.74	.58	.31	.28	.91	1.88	2.52	2.76	19.40	27.74	11.94
Orleans	8.66	3.78	2.10	5.76	1.02	.46	.32	.05	.08	1.82	9.49	11.16	44.65	65.22	24.72
Weaverville	8.21	5.75	4.72	3.83	1.75	.93	.13	.05	.54	2.85	5.95	7.74	42.45	65.22	24.72
Port Crook	3.16	3.33	3.62	1.59	1.25	.57	.25	.01	.39	1.06	2.81	5.38	23.32	40.36	13.19
Delta	6.65	3.36	7.03	8.66	4.55	2.03	.05	.00	.02	4.54	6.70	9.21	53.00	75.24	33.30
Reed's Camp	12.40	7.48	11.45	10.88	3.75	1.95	.06	.00	.57	5.63	3.72	12.06	69.95	95.46	55.27
Redding	7.07	4.98	3.91	3.66	1.45	.45	.05	.06	.37	1.89	3.62	6.74	34.25	59.92	8.78
Fort Redding	4.88	3.97	3.91	3.92	2.85	.31	T	.06	.16	.69	3.20	5.78	29.03	40.63	16.07
Red Bluff	5.97	3.87	2.54	2.18	.78	.37	T	.05	.41	1.22	2.84	3.76	23.99	61.65	13.52
Tehama	2.70	2.37	1.64	1.37	.54	.24	.05	.06	.18	.74	1.91	2.12	13.92	29.82	5.16
Corning	3.16	2.90	2.09	2.08	.44	.02	.05	.06	.23	.94	1.25	2.06	15.17	29.82	5.16
Meadow Valley	7.41	6.05	6.21	3.20	1.99	1.09	2.40	1.13	1.53	2.41	12.10	11.52	57.04	80.45	59.01
Mumford Hill	13.08	12.33	10.71	7.56	2.96	.57	.14	.32	.69	2.23	4.10	11.12	65.81	80.45	59.01
Camp Wright	8.92	6.50	5.22	1.95	.77	.22	.01	.02	.40	1.20	6.53	11.41	43.15	69.87	19.86
Laytonville	6.73	2.45	3.29	4.98	.24	.34	.92	.00	.34	1.06	7.10	10.16	37.61	40.55	34.98

Westport	4.40	3.54	2.52	4.57	1.38	31	.05	T.	.88	2.38	10.37	7.44	37.84	80.97	23.19
Mendocino	9.90	8.90	7.36	4.77	1.31	39	.08	.05	.45	2.60	5.51	7.96	49.28	80.97	23.19
Ukiah	6.88	4.78	4.57	3.52	.98	12	.48	.01	.48	1.43	3.94	6.21	32.92	54.88	19.88
Point Arenas	5.90	5.16	4.84	3.23	.82	22	.01	.01	.32	1.73	3.55	4.74	30.53	53.24	17.35
Orland	1.98	2.05	2.07	1.79	.66	34	.00	T.	.19	.64	2.05	3.30	15.07		
Willows	1.99	1.37	1.30	1.89	.39	12	.12	.01	.13	.59	1.46	2.51	11.76	18.84	6.47
Princeton	2.98	2.22	1.67	1.53	.35	45	.09	.08	.08	.25	1.02	2.60	13.52	26.30	10.20
Little Stony	2.50	1.04	.55	2.63	.00	58	.00	.00	.00	.27	13.29	3.51	24.37		
Colusa	3.67	2.82	1.86	1.54	.45	37	.04	.02	.19	1.04	1.82	3.17	16.99	32.84	9.20
Fount Springs	5.64	4.04	2.93	4.68	.25	T.	.00	.00	.00	.45	9.81	3.84	31.64		
Williams	2.55	1.75	1.34	1.51	.39	46	.00	.01	.13	.43	1.15	1.99	11.71	21.64	3.94
College City	2.30	0.91	3.01	1.62	.08	112	.00	T.	.37	.80	3.07	2.30	15.58		
Cantaloupe Valley	5.16	2.71	3.07	2.19	.82	24	.00	.00	.25	.54	3.02	4.92	22.92		
Chico	3.92	3.57	2.28	1.73	.71	34	.03	.03	.27	1.02	2.39	3.77	20.06	34.72	12.01
Cherokee	8.37	7.35	7.95	3.37	1.47	60	.11	.06	.51	2.95	5.40	6.59	44.93	63.26	28.35
Oroville	3.49	3.11	1.25	2.42	.29	10	.00	T.	.57	.80	3.34	9.46	24.83	31.21	18.46
Cherokee Reservoir	13.35	9.95	11.69	3.78	2.06	72	.30	.23	.54	4.08	7.80	5.77	60.27	78.78	42.34
Snartsville	7.11	5.70	4.48	3.16	.88	44	.05	.00	.11	1.50	3.74	5.01	32.18	46.78	17.99
Marysville	3.28	2.46	1.84	1.63	.59	25	.01	.01	.19	.89	1.74	3.33	16.22	26.86	6.65
North Bloomfield	9.37	7.81	7.58	5.73	2.04	64	.12	.02	.60	2.90	5.84	9.83	52.48	74.52	27.87
Bowman's Dam	14.00	11.07	10.77	7.78	2.59	83	.20	.02	.71	3.65	7.94	14.00	73.56	102.22	44.37
Boca	4.26	3.43	2.68	1.51	.40	13	.24	T.	.02	.57	.91	2.72	16.87	23.40	8.05
Truckee	5.98	5.84	4.16	2.67	1.05	39	.21	.02	.07	1.24	2.11	4.35	28.09	47.21	13.88
Nevada City	10.93	7.68	8.57	5.14	2.06	60	.04	.03	.54	1.82	6.77	12.09	56.27	115.26	17.28
Grass Valley	10.03	7.10	7.57	5.61	1.90	62	.05	.01	.69	2.81	6.06	8.17	50.62	65.32	30.23
Middletown	7.78	3.44	4.79	6.97	1.23	51	.00	.00	.49	1.43	4.94	10.41	41.99	52.04	28.43
Kono Tayee	4.86	3.34	3.68	1.16	.52	29	.00	.01	.19	1.02	4.21	2.53	21.81	31.96	12.08
West Butte	2.50	1.13	2.18	2.57	.85	32	.00	.00	.32	.73	1.83	2.67	15.10	19.80	12.13
Nicolaus	3.52	2.88	2.60	3.12	.60	13	.00	T.	.22	.90	1.98	3.28	19.23	26.76	8.93
Summit	8.39	8.96	6.78	5.77	1.68	62	.08	.01	.19	2.34	2.82	7.32	44.96	87.99	23.34
Emigrant Gap	10.18	9.30	8.77	5.65	2.47	74	.02	.01	.32	2.45	3.25	8.13	51.49	85.17	18.64
Cisco	10.83	10.74	8.79	5.22	2.36	79	.11	.00	.28	2.17	4.56	9.25	55.10	80.46	34.00
Alta	8.56	7.26	6.92	3.67	1.38	51	.00	T.	.34	2.17	4.81	6.52	42.14	69.70	17.24
Colfax	8.36	6.77	6.28	4.97	1.63	52	.00	.00	.32	1.74	5.06	7.67	43.33	60.03	27.61
Auburn	6.13	5.23	4.49	3.76	1.18	36	.02	.01	.34	1.42	3.49	5.94	32.37	44.87	17.26
Rocklin	3.95	2.97	2.56	2.10	.65	22	.01	.01	.10	.80	1.74	3.59	18.71	26.06	10.26
Dunnigan	3.52	2.22	2.08	1.89	.63	28	.00	.00	.15	.61	1.56	2.80	15.74	29.50	3.48
Knights Landing	2.11	2.57	1.88	2.47	.64	21	.00	T.	.11	.39	1.48	2.50	14.36	24.08	9.67
Woodland	3.36	2.48	2.07	1.84	.54	15	.01	.00	.08	.54	1.17	2.98	15.22	25.32	5.13
Davisville	11.69	8.23	1.83	1.60	.38	15	.01	T.	.10	.62	1.52	3.75	15.42	24.50	8.66
Georgetown	3.23	2.30	2.30	7.20	.82	84	.06	T.	.46	3.47	6.18	9.94	58.82	81.24	40.48
Placerville	7.10	6.05	5.79	7.69	1.88	84	.00	T.	.71	2.19	3.75	8.67	44.67	61.81	22.67
Shingle Springs	7.72	3.71	5.14	3.19	1.13	19	.19	.00	.23	.78	4.46	7.52	34.26	81.80	17.18
Healdsburg	5.52	9.31	2.28	.95	.39	08	.00	.02	.24	.11	1.81	15.22	35.93		
Sonoma	4.89	6.02	1.15	3.54	.29	00	T.	.00	T.	.95	6.83	3.41	27.08		

RAINFALL FOR EACH MONTH IN THE YEAR, ETC.—Continued.

NAME OF STATION.	January	February	March	April	May	June	July	August	September	October	November	December	Yearly Average	Greatest Seasonal Precipitation	Least Seasonal Precipitation
Petaluma.....	4.75	3.82	2.51	2.11	.53	.27	T.	T.	.12	.95	2.50	4.23	21.79	39.17	12.75
Calistoga.....	6.83	5.20	4.29	3.11	.79	.31	.00	.00	.23	1.78	3.06	4.89	30.49	50.20	7.33
Napa City.....	5.36	3.82	2.89	2.48	.76	.27	.01	.00	.43	.67	1.78	3.62	22.09	33.64	9.30
Knoxville.....	4.06	8.09	11.72	6.19	.16	.00	.02	.00	.00	1.32	.85	1.54	34.53		
Folsom.....	4.48	3.28	3.14	2.91	.84	.72	.00	T.	.20	1.09	2.63	4.59	23.90	35.04	9.90
Sacramento.....	3.71	2.77	2.95	1.90	.67	.12	.03	T.	.12	.63	2.12	4.53	19.41	36.36	4.71
Camp Far West.....	6.92	1.26	12.70	4.46	.86	.00	.00	.00	2.30	.10	3.96	8.64	41.20		
Brighton.....	2.83	3.16	2.52	2.89	.52	.20	.00	.00	.12	.61	1.46	2.22	16.53	24.12	9.22
Galt.....	2.76	2.44	2.37	2.31	.74	.18	.00	.00	.09	.77	1.27	2.44	15.37	19.35	9.61
Ione.....	2.88	3.28	3.06	3.39	.81	.30	.00	.00	.18	.91	1.67	2.86	19.34	29.73	13.04
Sutter Creek.....	6.56	4.91	4.90	4.78	1.33	.44	.03	.02	.26	1.80	3.88	4.28	33.19		
Jackson.....	5.18	4.69	4.88	5.17	1.24	.32	.00	.00	.42	1.66	3.04	4.86	31.46	37.90	21.20
Winters.....	5.95	.14	1.77	3.90	.16	.00	.00	.00	.00	.00	8.74	4.74	25.40		
Elmira.....	4.51	3.55	.95	3.14	.07	.00	.01	.00	.21	.19	.38	2.72	15.51	45.00	20.44
Vacaville.....	5.02	3.62	3.34	4.31	1.03	.00	.01	T.	.14	.98	2.43	2.51	17.94		
Denverton.....	4.33	2.29	2.53	1.87	.56	.29	.01	.00	.26	.69	1.90	4.67	19.35	31.50	6.98
Suisun and Fairfield.....	4.20	2.78	2.32	1.74	.53	.26	.00	.00	.00	.80	2.07	3.16	16.94		
Rio Vista.....	3.08	1.54	2.78	2.34	.75	.21	.00	.00	.10	.65	1.55	2.69	15.52	26.16	7.48
South Vallejo.....	3.04	2.23	2.42	2.19	.47	.18	.00	.00	.05	.84	3.72	1.36	14.84		
Bird's Landing.....	2.68	1.78	3.19	1.21	.00	.00	.00	.01	.07	1.49	1.78	3.27	16.78	28.17	5.24
Benicia Barracks.....	3.16	2.27	2.38	1.63	.49	.16	.01	.00	.30	1.37	3.81	6.12	28.09		
Point Reyes.....	4.29	3.24	3.94	4.06	.76	.20	.00	.00	.34	2.30	4.68	7.03	38.98	56.40	19.22
San Rafael.....	8.69	4.96	5.45	3.94	1.19	.40	T.	.00	.17	1.81	5.51	10.55	43.09		
Ross Valley.....	7.81	2.91	6.14	6.39	.16	1.40	.00	.00	.26	1.65	4.21	5.13	26.23	32.86	19.62
Sausalito.....	3.91	2.18	3.50	3.71	1.06	.60	.02	.00	.14	1.04	2.51	3.97	21.41	32.54	10.93
Angel Island.....	4.61	3.28	2.81	2.33	.47	.24	.01	T.	.14	1.04	3.15	3.73	38.74	16.28	7.69
Point Bonita.....	5.04	3.83	3.89	2.49	.97	.39	.03	.00	.25	1.70	3.15	3.73	25.47	29.65	
Alcatraz Island.....	3.90	2.86	1.95	1.48	.38	.17	.01	.01	.08	.61	1.87	3.66	16.98		
Fort Point.....	4.07	2.95	1.90	1.20	.56	.02	.01	.00	.16	.56	1.67	4.37	17.36		
San Francisco.....	5.06	3.76	3.07	2.04	.62	.15	.02	.02	.23	.88	1.82	5.20	23.80	49.27	7.40
Yerba Buena Island.....	2.59	2.09	2.23	2.18	.45	.27	.01	T.	.11	.35	1.82	3.40	16.15	27.30	6.13
Presidio.....	3.80	3.30	2.34	1.84	.53	.18	.02	.00	.66	.66	2.09	4.26	19.13	34.84	8.08
Farallone Islands.....	2.97	2.09	2.35	1.81	.74	.50	.00	.18	1.06	.58	2.52	3.54	18.18	26.15	10.54
Point San José.....	3.03	2.68	1.52	1.08	.38	.09	T.	.00	.03	.42	1.91	3.07	14.37		
Antioch.....	1.66	1.52	1.69	1.46	.39	.13	T.	T.	.07	.42	1.29	1.10	9.73	18.35	5.69

Martinez	2.70	2.80	2.68	2.43	.45	.22	.01	.00	.11	.53	1.44	2.65	16.02	23.35	10.23
East Brother Island	1.71	.99	.86	.74	.26	.11	.00	.00	.04	.30	1.45	1.01	7.47	11.36	4.56
Brentwood	2.08	1.55	1.61	1.68	.27	.23	.00	.00	.06	.32	1.21	1.75	10.76	16.76	6.77
Mt. Diablo	5.16	3.44	.58	.22	.29	.22	.00	.00	.00	.57	4.73	1.06	16.27	23.76	11.40
Byron	2.11	1.93	1.84	1.86	.32	.22	.00	.00	T.	.49	1.31	2.28	12.02	18.25	7.34
Farmington	1.82	1.39	2.12	2.77	.64	.21	.00	T.	.16	.68	1.31	2.15	13.69	23.34	2.44
Stockton	2.67	2.46	2.14	1.65	.55	.15	.01	.00	.05	.50	1.11	2.62	13.91	16.05	6.87
Lathrop	1.94	1.88	1.54	1.82	.57	.14	T.	.00	.08	.38	1.19	1.65	11.19	16.35	5.41
Ellis and Tracy	1.63	1.44	1.23	.97	.24	.15	T.	.01	.01	.28	1.01	1.87	8.84	14.68	2.91
Oakland	4.71	3.45	3.35	.44	.67	.44	.03	.02	.22	1.35	2.73	3.71	23.07	32.72	12.29
Livermore	2.51	2.46	2.15	1.49	.36	.16	T.	.01	.12	.51	1.43	2.62	13.81	22.75	6.01
Pleasanton	3.06	3.02	2.98	2.40	.58	.20	T.	.01	.08	.73	1.58	2.85	17.49	23.98	9.81
Niles	3.09	2.99	2.17	1.69	.59	.23	.00	.00	.10	.73	2.06	3.23	16.88	26.25	7.45
Midway	2.52	2.11	.50	.39	.06	.21	.00	.00	.20	.55	.29	2.35	6.62	10.95	2.24
Calaveras Valley	3.79	4.28	5.47	5.33	1.85	.40	.00	.00	.26	1.42	1.68	2.35	26.83	37.30	21.40
Langworth	2.38	1.16	2.98	2.84	.12	.24	.00	.00	.16	.79	2.30	2.55	15.52	22.75	9.47
LaGrange	2.86	2.83	2.40	2.87	.65	.07	.00	.00	.16	.85	2.05	2.80	16.54	25.87	5.74
Modesto	1.72	1.21	1.19	1.14	.33	.11	.01	.00	.09	.40	1.06	1.54	8.80	13.54	2.25
Grayson	2.21	1.77	1.62	1.22	.44	.17	.00	.00	.01	.47	1.22	2.70	11.83	23.51	4.05
Turlock	1.05	1.40	1.35	1.61	.41	.25	.00	.00	.13	.46	1.17	1.04	8.87	15.09	4.28
Hills Ferry	1.70	1.41	1.55	.70	.70	.27	.00	.00	.13	.35	1.78	1.89	11.81	19.20	7.54
San Mateo	4.00	2.95	2.64	2.19	.47	.24	T.	.00	.12	.92	1.92	2.95	18.40	27.49	7.34
Crystal Springs	7.77	6.54	7.14	4.07	1.36	.51	.03	.00	.29	1.95	3.19	5.29	38.14	55.59	17.15
Menlo Park	2.52	1.92	2.21	2.23	.45	.35	.02	T.	.05	.43	1.31	2.80	14.29	20.25	9.72
Woodside	5.71	2.74	4.78	4.55	.41	1.12	.00	.02	.16	1.27	5.90	9.47	36.13	37.40	21.59
Pigeon Point	2.39	1.93	2.12	3.31	1.01	.26	.01	.00	.18	.80	1.79	3.17	16.97	37.28	9.15
Año Nuevo Island	3.95	2.40	3.13	3.41	.94	.40	.09	.00	.25	1.06	2.52	5.19	22.24	31.91	9.88
San Andreas	9.06	8.15	6.73	3.81	1.31	.37	.01	.00	.28	1.88	4.11	10.34	46.05	70.32	21.95
Pilaritos	1.02	8.77	7.86	4.03	1.79	.03	.03	T.	.39	2.01	6.09	12.35	54.83	81.79	23.07
Point Montara	3.87	2.41	3.80	3.37	1.02	.45	.01	.00	.29	1.10	3.29	4.79	24.40	33.37	8.62
Mount Hamilton	3.68	6.05	6.05	4.54	2.34	1.31	.00	.04	.25	3.03	1.87	4.57	33.74	55.09	23.31
Wrights	7.91	4.48	2.60	11.32	.00	.00	.00	.00	.00	1.32	8.45	4.74	40.82	---	---
San Jose	2.70	2.49	2.47	1.97	.41	.20	T.	.00	.10	.53	1.16	1.78	13.81	21.17	4.99
Santa Clara	2.05	1.70	2.97	1.50	.52	.39	.00	.01	.03	.59	1.62	2.55	13.93	20.37	10.42
Los Gatos	6.41	5.60	1.68	3.59	1.15	.20	.02	.00	.03	.49	6.99	4.00	28.96	---	---
Tennant	2.99	3.63	4.01	3.03	.93	.21	.00	.03	.09	.62	.74	3.96	20.24	29.95	15.08
Gilroy	5.97	2.76	2.05	2.05	.40	.13	T.	.01	.20	.86	2.05	3.02	19.50	31.04	6.53
Livingston	1.72	1.22	1.13	2.03	.00	.00	.00	.00	.08	.08	.53	.46	7.35	---	---
Central Point	1.52	1.05	1.85	1.29	.48	.20	T.	.00	.08	.32	1.35	1.61	9.75	15.47	4.97
Merced	2.65	1.41	1.44	1.78	.54	.19	.01	.00	.10	.43	1.24	1.96	11.75	30.83	3.03
Atholme	1.62	1.81	1.50	2.40	.00	.12	.00	.00	.29	.16	.58	1.00	9.48	---	---
Los Banos	1.61	1.08	1.20	.77	.28	.13	.02	T.	.04	.21	1.46	.74	7.54	---	---
Aptos	3.81	3.27	1.76	3.50	.20	.00	.04	.00	.18	.58	3.15	5.57	22.06	---	---
Santa Cruz	6.18	3.98	3.18	3.03	.51	.34	.01	.01	.32	1.36	3.53	3.79	25.24	36.41	16.48
Watsonville	4.85	4.74	2.14	1.76	.59	.00	.00	.00	.10	1.17	1.75	7.43	24.53	---	---

Summer	.83	.94	.67	1.09	.33	.10	T.	.00	.04	.08	.52	.78	5.38	9.10	1.41
Caliente	1.36	1.99	1.52	2.30	.81	.17	.01	.00	.02	.46	.80	1.49	10.93	18.15	3.16
Tehachapi	1.28	3.54	1.68	1.83	.38	.49	.01	.09	.06	.42	.73	1.52	11.64	18.77	4.75
Keene	1.62	2.96	1.99	2.26	.49	.22	.01	T.	.03	.68	.92	1.90	13.11	24.25	5.23
Mojave	.59	1.33	.40	.25	.01	T.	.06	.00	.03	.10	.37	.91	4.05	9.96	.00
Fort Tejon	1.29	1.69	1.84	2.37	.96	.21	.01	.16	2.02	1.00	1.02	4.32	16.89	32.97	11.97
McClung Ranch	1.02	.94	.66	1.05	.20	.02	.02	.65	.00	.14	.11	1.49	5.64	6.25	5.21
Camp Cady	.27	.50	.56	.25	.05	T.	.34	.00	.00	.05	.00	.29	3.97	---	---
Paggett	.48	1.44	1.17	1.10	.49	.00	.00	.00	.03	.00	.00	2.40	6.45	---	---
Penner	.45	1.30	1.25	.15	1.09	.05	.00	.00	.06	.00	.00	1.32	6.17	---	---
Needles	---	1.86	2.08	.10	.75	.06	.02	.08	.05	.43	1.58	3.10	16.17	37.51	8.98
San Bernardino	3.66	3.03	1.97	1.75	.44	.48	.00	.00	.00	.21	.73	1.51	15.42	---	---
Laguna	1.56	3.48	3.59	2.82	1.04	.42	.00	.00	.00	.12	.94	3.05	18.36	---	---
Ontario	2.15	6.07	2.71	2.50	.40	.08	.00	.02	.00	.25	.50	1.20	9.31	23.35	5.43
Colton	1.36	2.36	1.42	1.55	.57	.08	.00	.09	.00	.00	1.67	4.77	13.58	---	---
Rancho de Jurupa	.95	1.51	3.12	.33	1.14	.00	.00	.60	.02	.27	.37	1.38	9.37	22.54	2.94
Riverside	---	1.97	1.93	1.16	.43	.12	.00	.00	.05	.45	.72	1.48	18.05	---	---
San Geronimo	1.12	4.24	2.99	2.92	.93	.04	.08	.00	.08	.53	1.70	3.33	22.42	35.74	12.00
Rings Station	4.65	4.69	3.44	2.82	.79	.19	.16	.04	.00	.00	12.38	4.13	22.51	---	---
Arroyo Grande	2.40	---	1.05	1.78	.00	.00	.00	.00	.00	.03	4.68	2.31	14.31	---	---
Santa Maria	.98	3.46	.98	1.87	.00	.00	.00	.00	.00	.07	4.73	2.05	14.83	---	---
Guadalupe	1.65	2.25	1.42	2.61	.00	.00	.05	.00	.00	.00	10.82	2.04	20.04	---	---
Los Alamos	1.48	.28	2.61	2.06	.23	.16	.00	.02	.00	.37	.44	1.87	12.23	32.54	2.30
Point Concepcion	1.24	3.81	2.73	1.48	.11	.12	.00	.00	T.	.46	1.49	3.59	17.29	34.47	4.19
Santa Barbara	3.87	3.88	1.90	1.61	.33	.48	.00	.00	.00	.42	4.89	2.24	27.84	---	---
Northhoff	4.18	6.40	4.50	3.48	1.25	.27	.00	.00	.01	.44	1.96	2.53	16.87	---	---
San Buenaventura	3.86	3.57	2.37	1.48	.38	.09	.08	.08	.01	.35	1.49	2.73	16.03	---	---
Los Angeles	3.93	3.76	1.90	1.34	.35	.27	T.	.03	.10	.41	1.09	1.92	11.71	---	---
Ravenna	1.61	2.68	2.11	1.38	.00	.16	.00	.00	T.	.26	1.45	2.64	14.72	---	---
Newhall	2.09	3.55	2.27	1.82	.48	.48	.02	T.	.00	.36	1.47	2.64	15.29	---	---
San Fernando	2.31	3.79	2.27	2.00	.43	.20	.00	.04	.02	.45	2.36	2.51	19.45	---	---
Cahuenga Valley	2.69	5.08	2.95	2.18	.97	.06	.00	.01	.01	.33	1.06	1.68	12.10	24.50	9.00
Spadra	2.80	2.81	1.77	1.31	.32	.00	T.	.00	.08	.01	2.47	1.39	12.49	17.30	10.22
Santa Monica	2.18	3.32	.61	2.07	.36	.00	.00	.38	.00	.00	.72	.87	10.84	---	---
Downey	1.28	2.98	1.69	2.88	.04	.00	.05	.24	.00	.00	.96	2.89	10.61	---	---
Drum Barracks	---	1.26	2.24	.37	.02	.00	.00	.07	.00	.02	2.84	1.22	15.84	---	---
Orange	6.80	1.83	1.18	1.55	.33	.00	.00	.00	T.	.31	.93	1.90	12.12	26.17	4.35
Anaheim Barracks	1.81	4.75	1.74	1.48	.54	.13	.00	.00	.00	1.01	1.75	2.97	25.45	60.62	12.09
Alosta	4.06	6.19	5.17	3.10	.78	.42	.00	.03	.00	.13	.38	1.06	4.97	12.81	.84
Whitewater	.64	1.21	1.04	.48	.00	.00	.00	.00	.00	.00	.00	2.05	4.62	---	---
Calabazon	.15	.12	.00	1.20	1.10	.00	.00	.00	.00	.01	.24	.45	1.92	5.60	.10
Indio	.34	.61	.12	1.10	.65	.00	.00	.05	T.	.70	1.36	2.42	17.70	---	---
Fall Brook	3.51	3.74	2.97	2.24	.53	.11	.02	.05	.05	.11	6.69	2.08	21.28	---	---
San Louis Rey	3.18	3.53	2.00	2.39	.09	.20	.00	.00	.01	.48	1.39	1.92	15.69	32.05	7.70
Escondido	3.27	3.23	2.54	1.84	.53	.22	.00	.02	.25	---	---	---	---	---	---

WASHINGTON TERRITORY, OREGON, CALIFORNIA, NEVADA, UTAH, AND ARIZONA.

The following temperature and rainfall figures for January, 1888, by Mr. H. E. Wilkinson, Observer in the office of the officer in charge of the Pacific Coast Division, Signal Service Corps. Mr. Wilkinson has also given the lowest temperature ever recorded, along with the date, since observations began, and it will be observed, in most cases, that the polar wave which passed over the Pacific Coast during January, was colder than ever before recorded. The table is both interesting and instructive:

STATIONS.	Monthly Mean Temperature.	Highest Temperature and Date.	Lowest Temperature and Date.	Lowest Temperature Previously Recorded, and Date.	Rain-fall.
Tatoosh Island, W. T.	36.4	55.4, 30th	14.0, 13th	-----	12.10
Port Angelos, Wash. Ter..	31.7	54.2, 25th	06.3, 14th	-----	5.43
Olympia, Wash. Ter.	32.5	56.0, 30th	-01.8, 15th	02.0.... February, 1884	11.38
Fort Canby, Wash. Ter.	35.5	55.3, 31st	11.0, 15th	16.0.... February, 1884	11.39
Spokane Falls, Wash. Ter..	15.5	51.7, 27th	-30.5, 16th	-27.7.... January, 1883	3.96
Walla Walla, Wash. Ter.	21.1	65.4, 31st	-17.1, 16th	-----	2.21
Portland, Oregon	30.0	62.0, 25th	-02.0, 15th	03.0.... December, 1875	8.50
Roseburg, Oregon	35.1	71.1, 26th	-06.0, 16th	03.0.... February, 1884	6.62
Ashland, Oregon	32.7	62.0, 26th	-03.0, 14th	12.0.... February, 1887	3.81
Linkville, Oregon	20.1	45.6, 31st	-23.9, 15th	-04.0.... February, 1884	2.77
Fort Klamath, Oregon	16.6	46.0, 26th	-39.0, 15th	-34.0.... February, 1884	5.71
Lakeview, Oregon	21.9	50.0, 27th	-24.0, 15th	-----	2.85
Eureka, California	44.6	76.9, 26th	20.3, 14th	-----	12.95
Fort Bidwell, California ..	21.8	51.2, 30th	-25.5, 14th	-----	3.28
Red Bluff, California	40.9	59.5, 30th	17.5, 14th	19.0.... January, 1883	4.08
Sacramento, California	42.8	63.0, 25th	19.0, 14-15	19.0.... January, 1854	4.81
San Francisco, California ..	46.3	62.8, 28th	28.7, 15th	33.1.... February 5, 1887	6.81
Fresno, California	44.1	68.5, 26th	19.6, 16th	-----	1.75
Keeler, California	35.3	58.0, 31st	11.8, 15th	-----	0.70
Los Angeles, California	50.0	71.0, 26th	30.9, 10th	28.0.... February, 1883	6.04
San Diego, California	51.6	64.5, 21st	35.0 8th	32.0 Dec., 1879, Jan., '80	1.96
Yuma, Arizona	51.6	78.6, 28th	20.7, 11th	22.5.... January, 1883	0.18
Fort Apache, Arizona	34.6	64.7, 26th	06.7, 13th	-09.0.... February, 1880	1.42
Prescott, Arizona	27.5	56.0, 28th	-12.0, 8th	-18.0.... December, 1879	1.30
Winnemucca, Nevada	18.7	49.6, 25th	-28.0, 15th	-23.0.... January, 1883	1.40
Carson, Nevada	27.6	57.8, 30th	-09.6, 16th	-----	1.51
Salt Lake City, Utah	23.5	52.8, 30th	-16.7, 15th	-20.0.... January, 1883	1.52
Helena, Montana	5.3	56.5, 30th	-41.0, 15th	-40.0.... December, 1880	0.79
Boise City, Idaho	17.7	61.2, 28th	-27.8, 16th	-27.0.... January, 1883	1.54

EFFECT OF TREES AND VEGETATION ON CLIMATES.

The following on climates, and how they are affected by trees and vegetation, is from the *Encyclopedia Britannica*, volume six, ninth edition, in which it says:

When the ground is covered with vegetation the whole of the sun's heat falls on the vegetable covering, and as none of it falls directly on the soil, its temperature does not rise so high as that of land with no vegetable covering. The temperature of plants exposed to the sun does not rise so high as that of soil, because a portion of the sun's heat is lost in evaporation, and the heat cannot accumulate on the surface of the leaves as it does on the soil. Hence, the essential difference between the climates of two countries, the one well covered with vegetation, the other not, lies in this, that the heat of the day is more equally distributed over the twenty-four hours in the former case, and, therefore, less intense during the warmest part of the day.

But the effect of vegetation on the distribution of the temperature during the day is most markedly shown in the case of *forests*. Trees, like other bodies, are heated and cooled by radiation, but owing to their slow conducting power the times of the daily maximum and minimum temperature do not occur till some hours after the same phases of the temperature of the air. Again, the effects of radiation are in the case of the trees not chiefly confined to a surface stratum of air a very few feet in thickness, but, as already remarked, are to a very large extent, diffused through a stratum of air, equaling, in thickness at least, the height of the trees. Hence, the conserving influence of forests on climate, making the nights warmer and the days cooler, imparting, in short, to the climates of districts clad with trees, something of the character of insular climates. Evaporation proceeds slowly from the damp soil usually found beneath trees, since it is more or less screened from the sun. Since, however, the air under the trees is little agitated or put in circulation by the wind, the vapor arising from the soil is mostly left to accumulate among the trees, and hence it is probable that forests diminish the evaporation, but increase the humidity, of climates within their influence. The humidity of forests is further increased by the circumstance that when rain falls, less of it passes immediately along the surface into streams and rivers; a considerable portion is at once taken up by the leaves of the trees, and percolates the soil, owing to its greater friability in woods, to the roots of the trees, whence it is drawn up to the leaves and there evaporated, thus adding to the humidity of the atmosphere.

Much has been done by Dr. Marsh and others in elucidation of the influence on climate of forests and the denudation of trees, in so far as that can be done by the varying depths of lakes and rivers, and other non-instrumental observations. Little, comparatively, has been done anywhere in the examination of the great practical question of the influence of forests on climate, by means of carefully devised and conducted observations made with thermometers, the evaporating dish, or the rain gauge. The most extensive inquiry on the subject yet set on foot has been for some years conducted in the forests of Bavaria, under the direction of Professor Ebermeyer, and a like inquiry was begun in Germany in 1875—the more important results being, that during the day, particularly in the warm

months, the temperature in the forests is considerably lower than outside in the open country, there being at the same time a slow but steady out-flow of air from the forest; and that during the night the temperature in the forests is higher, while there is an inflow of air from the open country into the forest. The mean annual temperature in the forest increases from the surface of the ground to the tops of the trees (where it is observed to approximate to what is observed in the open country); a result evidently due to the facility of descent to the surface of the cold air produced by terrestrial radiation, and to the obstruction offered by the trees to the solar influence at the surface.

The mean annual temperature of the woodland soil from the surface to a depth of four feet is from 2 degrees to 3 degrees lower than that of the open country.

A series of observations was begun at Cornwath, Lanarkshire, in 1873, at two stations, one outside the wood and the other inside the wood, in a small grass plot of about fifty feet in diameter, clear of trees. From these valuable results have been obtained relative to the differences in the daily march of temperature, and the different rates of humidity, the most important being the substantial agreement of the mean annual temperature of the two places. The establishment of a station, with underground thermometers, which it is proposed to erect under the shade of the trees close to the station in the cleared space, will furnish data, which will not only throw new light on the questions raised in this inquiry, but also on the movements and viscosity of the air, and solar and terrestrial radiation.

FORESTS AND LAKES A PROTECTION AGAINST FROSTS AND CHANGE-ABLE WEATHER, AND OTHER IMPORTANT CLIMATIC MEMORANDA.

Why forests and lakes protect the countries in which they are situated from the extremes of heat and cold, and why the Swiss build their houses on the sides of the hills and mountains instead of in the valleys, and also shows the variability in the change of temperature caused by elevation. This information is culled from the ninth edition of the "Encyclopedia Britannica," and is as follows:

Observations show that the rate at which the temperature falls with the height is a very variable quantity—varying with latitude, situation, the state of the air as regards moisture or dryness, and calm or windy weather, and particularly with the hour of the day and the season of the year. In reducing temperature observations for height, 1° for every three hundred feet is generally adopted. In the present state of our knowledge this or any other estimation is at best no more than a rough approximation, since the law of decrease through its variations requires yet to be stated, being in truth one of the most intricate and difficult problems of climatology awaiting investigation at the hands of meteorologists.

Among the most important climatic results to be determined in working out this problem are the heights at which in different seasons the critical mean temperatures, which have important relations to animal and vegetable life, are met with in ascending from low lying plains in different regions of the world. * * * Under this head by far the most important class of conditions are those which result in extraordinary modifications,

amounting frequently to subversions of the law of the decrease of temperature with the height. This will perhaps be best explained by supposing an extent of country diversified by plains, valleys, hills, and table lands to be under atmospheric conditions favorable to rapid cooling by nocturnal radiation. Each part being under the same meteorological conditions, it is evident that terrestrial radiation will proceed over all at the same rate, but the effects of radiation will be felt in different degrees and intensities in different places. As the air is in contact with the declivities of hills and rising grounds, becomes cooled by contact with the cooled surface, it acquires greater density, and consequently flows down the slopes and accumulates on the low lying grounds at their base. It follows, therefore, that places on rising ground are never exposed to the full intensity of frosts at night; and the higher they are situated relative to the immediately surrounding districts the less are they exposed, since their relative elevation provides a ready escape downwards for the cold air almost as speedily as it is produced. On the other hand, valleys surrounded by hills and high grounds not only retain their own cold of radiation, but also serve as reservoirs for the cold heavy air which pours down upon them from neighboring heights. Hence mist is frequently formed in low situations, whilst adjoining eminences are clear. Along low lying situations in the valleys of the Tweed and other rivers of Great Britain laurels, araucarias, and other trees and shrubs were destroyed during the great frost of Christmas, 1860, whereas the same species growing on relatively higher grounds escaped, thus showing by incontestible proof the great and rapid increase of temperature with height at places rising above the lower parts of the valleys.

This highly interesting subject has been admirably elucidated by the numerous meteorological stations of Switzerland. It is there observed in calm weather in winter, when the ground becomes colder than the air above it, that systems of descending currents of air set in over the whole face of the country. The direction and force of these descending currents follow the irregularities of the surface, and, like currents of water, they tend to converge and unite in the valleys and gorges, down which they flow like rivers in their beds. Since the place of these air-currents must be taken by others, it follows that on such occasions the temperature of the tops of mountains and high grounds is relatively high, because the counter currents come from a great height, and are therefore warmer. Swiss villages are generally built on eminences rising out of the sides of the mountains with ravines on both sides. They are thus admirably protected from the extremes of cold in winter, because the descending cold air-currents are diverted aside into the ravines, and the counter currents are constantly supplying warmer air from the higher regions of the atmosphere.

Though the space filled by the down flowing current of cold air in the bottom of a valley is of greater extent than the bed of a river, it is yet only a difference of degree, the space being in all cases limited and well defined, so that in rising above it in ascending the slope the increased warmth is readily felt, and, as we have seen, in extreme frosts the destruction to trees and shrubs is seen rapidly to diminish.

The gradual narrowing of a valley tends to a more rapid lowering of the temperature, for the obvious reason that the valley thereby resembles a basin almost closed, being thus a receptacle for the cold air-currents which descend from all sides. The bitterly cold furious gusts of wind which are often encountered in mountainous regions during night are simply the out-rush of cold air from such basins.

Two chief causes which tend to counteract these effects of terrestrial radiation are forests and sheets of water. * * * Deep lakes may be

regarded as sources of heat during winter, and places situated near their outlet are little exposed to cold gusts of wind, while places on their shores are free from the severe frosts which are peculiar to other low lying situations. The frosts of winter are most severely felt in those localities where the slopes above them are destitute of vegetation, and consists only of bare rock and soil, or of snow. If, however, the slopes be covered with trees, the temperature is warmer at the base and up the sides of the mountain, the beneficial influences of forests consisting in the obstacles they offer to the descending currents of cold air, and in distributing the cold produced by terrestrial radiation through a stratum of the atmosphere equaling in thickness the height of the trees. Hence as regards strictly local climates, the intelligent knowledge of which is of great practical value, it follows that the best security against the severity of cold in winter is afforded where the dwellings are situated on a gentle acclivity a little above the plain or valley from which it rises with an exposure to the south, and where the ground above is planted with trees. * * * Extensive forests tend to mitigate the extremes of temperature and distribute its daily changes more equably over the twenty-four hours.

ITALIAN CLIMATE.

The following article was taken from the work of Dr. J. Henry Bennett, entitled "Winter and Spring on the Shores of the Mediterranean, or the Riviera of Italy." The description is of the climate of Mentone, as that is a good sample in general of the great Riviera of Northern Italy. It will be found in many particulars to resemble the various climates of California, and as a health resort resembles very much the winter climate of Santa Barbara, with the balance in favor of our own State:

The characteristics of the Mentone winter climate are: Absence of frost, prevalence of northerly winds, moderate dryness of the atmosphere, complete absence of fog, paucity of rainy days, clearness and blueness of sky, general heat and brilliancy of the sun, cool night temperature, and a bracing coolness of the atmosphere generally.

Careful observation, during ten winters, of the meteorological conditions which reign on the Genoese Riviera, and at Mentone, has gradually enlarged my experience, and led me to form a clear idea of their nature and of their influence over the climate.

As we have seen, the Mentonian district, which has been the principal seat of my observation and study, is a small amphitheater, situated on the coast line or undercliff of the mountains of Southern Europe, as they reach the Mediterranean. To the northeast, north, and northwest, are the highest mountain chains of Europe, extending hundreds of miles.

Further still to the northeast lies the table land of Europe, which reaches to the Arctic regions. As a necessary result of this geographical position, the northern winds—especially the north and northeast, must be very dry winds.

Firstly, they have been dried by traveling over a great continent.

Secondly, they have had nearly all the remaining moisture wrung out of them by the extreme cold of the high regions, which they have to pass over when crossing Alpine chains, before they reach the Mediterranean. The physical evidences of the extreme dryness of the atmosphere, when

northerly winds reign, are manifold. Firstly, with a north and northeast wind, there is generally a difference of from 9° to 12° Fahrenheit, between the wet and dry-bulb thermometers.

With the northwest, which crosses lower mountain chains, and may come from the North Atlantic, the difference is generally from 5° to 8° or 9° .

Secondly, the atmosphere is generally clear; the sky blue; the sun shines warmly; the nights are comparatively cold, and the summits of mountains above four thousand feet high, are generally free from clouds.

These phenomena are easily explained on meteorological grounds. The presence of moisture in the air, either as imperceptible vapor or as cloud, gives a white appearance to the sky, and veils the earth from the sun's rays. It thus becomes a kind of shield, a protection from the warmth of the sun.

When moisture scarcely exists, and the air is dry, as it is in the Mediterranean with a north wind, in Egypt, in the desert of Sahara with south winds, indeed, in all dry regions, the sky is always blue, the sun shines with great power, and at night, owing to rapid radiation of the earth's heat into space, the air becomes comparatively cold.

Such is the climate of the north Mediterranean coast with northerly winds. The sky is clear and blue, the sun shines like a globe of fire, which it really is, and its rays reach the earth with great power. The nights are there clear, the stars shine with a brightness unknown in the north, and the temperature of the air is cold compared with what it is in the daytime. * * * The English climate is partly explained by the above facts. The atmosphere above the British Isles is always loaded with aqueous vapor, which gives to the sky its usual whitish color. The aqueous vapor of the atmosphere shields the earth from the action of the sun's rays during the day, and prevents radiation during night.

Hence the coolness of our summer, as compared with that of the same continental latitudes, where this aqueous shield is wanting. In winter, when the sun is low on the horizon and its rays are feeble, the cloud atmosphere, by promoting radiation, keeps in the heat previously acquired, and contributes, with the gulf stream, to render the British winter milder than that of the drier continental regions in the same parallel of latitude. The influence of these meteorological conditions on climate has been well explained of late by Professor Tyndall in his lectures on heat. It is also beautifully illustrated by the meteorological observations of Mr. Glaisher during his aeronautic ascensions. Once above the aqueous vapor and the clouds, which extend several thousand feet high in our climate, a dry atmospheric region is reached, where the sky appears intensely blue. The sun's rays here have so much power that they scorch and blister the face and hands, although the thermometer may be much below the freezing point. The Mediterranean climate, when the north winds blow, is like this upper region of our own atmosphere. The air, containing but little moisture when these north winds reign, as they do during the greater part of the winter, the sky is blue, and the sun shines through it fiercely, even in mid-winter. It thus warms all the objects with which it comes in contact, and which are sheltered from the wind, that is the entire under cliff.

The northwest wind, called the mistral in this part of the Mediterranean, usually blows from the south of France as a cold, dry, cutting wind, which is much dreaded. One of the great climatic advantages of Mentone is its complete protection from this wind by the Turbia Mountain, which separates it from Nice.

When the mistral blows, the sky remains blue and the sun shines warmly. Sometimes, however, the northwest wind blows no longer as a

local wind originating in the south of France, but as a grand northwest European wind coming from the north seas and northwest Atlantic. Then it brings black clouds loaded with rain which may fall in the district or out at sea, and the wet bulb thermometer rises. When rain does fall, with a northwest wind, there is generally a grand oceanic and European northwesterly storm; but such rain is rare. It is still more so with the strictly continental winds, or the north northeast and east winds. Indeed, when rain falls at Mentone, with any such winds, it is generally at the end of a European gale from these regions, of which the newspapers bring us the details a few days later. Such rain becomes snow on the higher elevations of the mountains that surround and inclose the district.

Even with a direct southeast wind, snow may fall, exceptionally, at Mentone, inside the amphitheater, owing to its being open to the southeast in a line with the high mountains of Corsica, which lie direct southeast and are thus covered with snow. Snow, with a southeasterly wind, generally falls in the latter part of the winter, in March for instance, when immense masses of snow have accumulated on the Corsican mountains. Before this accumulation has taken place, in early winter, the southeast wind is a warm wind, the *sirocco*. Thus during the winter there is very little rain from the northern quarters; and as, during the winter months, from November to May, the wind is generally from these quarters, the dry, clear, sunny, but cool winter climate of Mentone is explained. The exceptional winter warmth, for the latitude, depends on mountain protection and on other causes.

When rain falls, with the wind in the northern quarters, it is generally gentle, moderate in quantity, and does not present the tropical character. When the northerly winds bring clouds and scud over the mountains, and the atmosphere in the Mentonian amphitheater and out at sea is warm, these clouds often melt gradually and disappear. It is a very interesting sight to see thick banks of clouds thus rising over the summits of the higher mountains in the background, expanding on the sky above, and then melting away as they advance southwards into warmer atmospheric strata. After a time, however, if the wind which impels them is powerful, they cool the air, accumulate, and the entire sky becomes overcast.

With southwesterly and southeasterly winds, the fall of rain at Mentone, and on the Riviera in general, is often very great in a limited space of time; indeed, quite tropical. This is also sometimes the case when northerly winds meet southerly currents on or near the coast line, and condense their moisture. The rainfall may amount to five or six inches in the twenty-four hours.

Whenever this occurs, the watercourses are filled, from bank to bank, with enormous volumes of water, which carry down great masses of stone, like straws, from the mountains, and excavate wide beds as they approach the shore line. These watercourses are at other times, as in central and southern Italy, mere rivers of stones with a thin stream of water trickling through the middle.

On one night—December, 1859—four and a half inches fell in ten hours. The greatest amount of rain that was known to have fallen in twenty-four hours at Greenwich in five years was 2.63 inches.

The total rainfall during my first winter's residence at Mentone, 1859-60, was 23.68 inches, from October ninth to April twenty-first, viz.: October, 8.02 inches; November, 2.21; December, 6.96; January, 3.24; February, .18; March, 1.26; and April, 1.81 inches. These data were given me by a friend who kept an accurate register. According to my own observations, it rained in that winter, in November, 5 days; in December, 5; in Janu-

ary, 4; in February, 1; in March, 6; in April, up to the twenty-third—8 days; in all, 29 days, from November third until April twenty-third. In October it rained nearly every day.

It very often rains on the mountains, or a few miles out at sea, when it is quite clear and fine on and near the seashore. In the former case, the wind is generally a southern wind, and, as it ascends the mountain, it evidently meets with colder strata of air which precipitate its moisture, forming rain clouds. I have repeatedly sat on the mountain side and watched a current of warm air rise from the sea, at a distance, form at first a vapor on the shore, and then a white cloud, gradually ascending the mountain. It is singular to see the small cloud thus spring, as it were, from the waves near the coast line, gradually expanding and enlarging as it creeps up the mountain side.

The rain, in these instances, is often confined to the upper mountains, and increases the volume of torrents and rivulets, although it may remain quite fine at and around Mentone, as also on the sea horizon. When, on the contrary, it rains a few miles out at sea, whilst there is fine, dry weather at Mentone, the wind generally comes from the contrary direction—from the north. The cold north wind, passing overhead, impinges upon the sea some distance from the shore, meeting warmer atmospheric strata. Dark banks of clouds thus form on the horizon and rain falls several miles from the coast. In either case the coast ledge may, and often does, enjoy a happy immunity.

The average fall of rain at Nice is 25 inches. I presume that the annual fall at Mentone is greater, from its being surrounded by mountains on all sides but the south, the southeast, and southwest.

The average number of rainy days at Nice is 60. M. de Brea, a native and resident of Mentone, and a gentleman of high scientific attainments, has published a meteorological table, founded on ten years' observation, from 1851 to 1861. According to his experience, the average number of days or nights during which it rained little or much at Mentone is 80, or 20 more than at Nice. We may presume, therefore, that the fall of rain is greater, although the consequence is not necessary. At Greenwich the average rainfall is only 25 inches, yet the number of rainy days is 155. At Torquay the average number of rainy days is also 155. At Pau the average rainfall is 43 inches; rainy days, 119. At Malaga the number of rainy days is only 40. At Madeira the rainfall is variable; the average about 30 inches; the rainy days, 88.

The amount of rain that falls does not so much characterize the climate of a locality as the manner in which it falls. At Mentone, as at Nice and along the entire Riviera, thoroughly cloudy days and days of incessant rain are rare. They do, however, occur occasionally in the winter, and principally with continued southerly winds. The sky is then quite obscured, so that the sun is not seen as in the north, and rain may fall for several days and nights. But this does not usually take place more than two or three times in the course of the winter. Many inches of rain fall on these occasions, thoroughly soaking the ground. After two or three days the clouds disperse, the sun peers forth, and again courses through a clear blue sky like a blazing fire. In a few hours the ground becomes dry, and many days of uninterrupted sunshine generally follow, during which outdoor life goes on as during a fair rainless September in England.

There are two rainy seasons on the Riviera—one, the autumnal equinox at the latter end of September and during October; the other, the vernal equinox in March, ending with the first week in April. The autumnal rainy season is rather irregular in its periodicity. It usually occurs under

the influence of southwesterly gales, and extends, more or less, into November. The rains do not last in most winters more than three or four weeks, and that not continuously. The rest of the winter, until the spring, is generally dry and fine, under the influence of the northerly winds, with the exception of a few occasional days of rain, when the wind turns to southern quarters. Heavy rain again falls in the latter half of March, with southwesterly or southeasterly gales and storms, as in northern Europe. These rains saturate the earth and renew the springs.

Under their fostering influence, and with the help of the ardent sun, which shines through the clear dry atmosphere, vegetation then advances with astonishing rapidity. As in England, and in most other regions, the seasons, and more especially the winter, vary in different years, so that it is difficult to form a correct opinion from the experience of any one year. There are winters during which southwesterly winds prevail, often clouding the sky and bringing rain at intervals throughout the winter. Such were the winters of 1864-65, and of 1868-9.

During the summer but little or no rain falls. In some years the drought lasts, without cessation, for six or seven months, from April or May to October or November. Thence the absolute necessity of tanks for the irrigation of the lemon and orange trees, which, as we have stated, cannot thrive and bear fruit without irrigation during the dry season. The exceptional dryness of the summer along the Riviera, in the south of France, in Spain, and in the Mediterranean generally, is explained by the fact that this great inland sea lies on the northern limit of that part of the earth's surface to which, in physical geography, is given the name of the rainless tract. The highest expression of this region is the desert of Sahara, which continues those of Arabia and Central Asia. The principal cause of their existence is, no doubt, the passage of northeasterly winds over Asia and southern Europe during the entire year, either as upper or surface currents. These winds passing over continents and great chains of mountains, gradually lose their moisture, until they have but little to bestow on the regions they attain in the more advanced stage of their progress, and the latter consequently become dry regions or deserts for want of rain. The winds that course over the earth's surface may be divided into two principal currents.

The one, from the poles to the equator; the other, a return current from the equator to the poles.

Owing to the earth's diurnal motion of rotation, the wind from the poles to the equator takes a slanting easterly direction; that from the equator to the poles a westerly one. Thus, in the northern hemisphere the wind from the pole to the equator is a northeast wind; that from the equator to the pole a southwesterly one. From the tropic of Cancer, or from about latitude 30° to the equatorial region, the northeast wind is always a surface wind, and constitutes the northeast trade. From the pole to the tropic the systemic northeast wind is either an upper current or a surface one, according to seasons and other influences.

According to M. de Brea's statistics, omitting the fractions, the annual number of fine days in which the sun shines without clouds is 214; the number of days in which the sun shines with clouds is 45; and the number of days in which the sun is not seen, the sky being completely obscured, without rain, is 24; to which we may add: days of rain, 80, many in part sunshiny.

The rainy days principally occur between the months of October and May. In summer, as has been stated, there is sometimes not a drop of rain for months together. The winds can then blow from the south with-

out their vapor being condensed into clouds and rain on the mountain summits which skirt the coast. The mountains are themselves heated with the powerful rays of the summer sun, and the sea-borne winds meet currents still warmer than themselves. Even in winter, a very gentle south wind from the sea, may not bring cloud and rain. All its superabundant moisture may be at once taken up, owing to the great dryness of the colder mountain atmosphere. Notwithstanding the mildness and sunny brightness of the weather, yet it is still decidedly winter at Mentone from December to April. The nights are chilly during four months—from December to April—the thermometer generally falling to between 46° and 54° with south winds, and with north winds to between 40° and 45° , sometimes below 40° . In the daytime it is generally cool in the shade, and out of the shade when the sun is obscured by clouds. The ordinary "shade maximum" varies from 50° to 56° when the sun shines, and is lower still when it does not. The temperature always falls as soon as the sun disappears or sets, and often at once reaches the minimum of the twenty-four hours, owing, no doubt, to a cool down draught from the mountains. The heat is evidently produced by the direct influence of the sun. In a south room, whenever the sun is on the room, the window can be left wide open; and, without a fire, the thermometer will generally remain at about 64° . But as soon as the sun disappears, the window has to be shut, and chilly persons require a wood fire.

In midday, the north rooms on the same floor are, even when the sun shines, four, six, or eight degrees colder than the south. Even before sunset, as soon as the sun disappears behind the mountains, there is a difference of six or eight degrees in the temperature of the atmosphere if northerly winds prevail. When the sun is permanently obscured by clouds, the air often feels chilly, even with a south wind, and the complaints against the climate are loud and numerous.

The climate of the Mentone amphitheater and of the Riviera in general is a favorable specimen of what botanists call the warmer temperate zone. Plants live nearly everywhere that frost kills at other places. Many annuals in a colder region become perennials here, and many forms of vegetation new to the more northern flora make their appearance. It is the Mediterranean climate, but that of the more favored Mediterranean regions. In Italy, for instance, the most protected southern parts must be reached to find the same immunity from frosts. On the southern shores of the Mediterranean, in Algeria, there is the same immunity from frost; but owing to the presence of the Atlas Mountains, cool rains predominate throughout the winter, with the north winds which usually rule at that time of the year. Mentone also is warmer and more protected from northern winds than its neighbor, Nice; more so than Cannes, although the general features of the climate must be the same, for all are only a short distance apart. It is the question of fruit walls in the same orchard—one higher and giving more protection than the others, but all turned towards the south. At Nice there are sheltered situations, such as the Cimiez, the Carabacel, and Villafranche, in which the protection is greater than in the town itself, and which thus assimilates to Mentone without, however, equaling it.

Foreign Temperature, by Sir James Clark, with Palermo, Algiers, and Mentone added to the table by Dr. Henry Bennett, from whose work, "Winter and Spring on the Shores of the Mediterranean," the following table was taken:

NAMES OF PLACES.	MEAN TEMPERATURE OF MONTHS.												MEAN TEMPERATURE OF SEASONS.				Mean Annual Temperature.
	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Winter.	Spring.	MEAN TEMPERATURE OF SEASONS.		
															Summer.	Autumn.	
Cairo	58.1	56.1	64.6	77.9	78.3	83.7	85.8	85.8	79.2	72.3	63.0	61.3	58.5	73.6	85.1	71.5	72.2
Santa Cruz (Canaries)	63.8	64.3	67.2	71.3	72.1	73.9	77.3	78.9	77.4	74.7	70.4	65.8	64.6	68.9	76.7	74.2	70.9
Ceylon (Hill District)	63.2	66.5	70.8	72.7	71.4	69.4	69.8	68.9	70.8	70.9	70.6	69.7	69.3	70.8	69.5	71.3	70.2
Malta	56.5	56.3	58.1	61.8	67.4	73.8	79.6	81.2	77.8	71.1	64.2	59.6	57.5	62.8	78.2	71.0	67.3
Corfu	52.6	51.8	54.6	58.3	64.7	72.3	77.7	81.3	78.3	70.8	63.8	58.4	54.3	59.8	77.1	71.0	65.6
Madeira	59.7	60.3	61.9	62.0	63.4	66.9	70.0	71.9	71.3	66.8	64.0	61.4	60.6	62.4	69.6	67.3	65.0
Palermo													53.1	59.3	74.7	66.8	64.4
Algiers													55.0	66.0	77.0	60.0	64.0
Port Jackson (N. S. W.)	61.7	71.6	69.6	64.0	59.7	54.9	53.9	55.3	59.3	63.5	67.7	69.2	54.6	63.4	70.9	64.0	62.9
Cadiz	51.4	53.7	55.2	59.6	63.8	68.2	70.3	72.9	70.2	67.1	58.8	53.6	52.9	59.5	70.4	65.4	62.9
St. Michael's (Azores)	59.0	59.5	61.0	63.0	67.0	63.0	68.0	70.0	68.0	63.0	56.0	55.6	57.8	61.2	68.3	62.3	62.4
Naples	46.5	48.5	52.0	57.0	66.5	71.0	75.0	76.5	72.5	65.0	54.5	50.5	48.5	58.5	70.8	64.5	61.4
Mentone	48.2	48.5	52.0	57.2	63.0	70.0	75.0	75.0	69.0	64.0	54.0	49.0	49.5	60.0	73.0	55.6	60.8
*San Remo	47.2	50.2	52.0	57.0	62.9	69.2	74.3	73.8	70.6	61.8	53.3	49.3	48.9	57.3	72.4	61.9	60.2
Rome	47.6	49.4	52.0	56.4	64.5	69.2	73.3	74.9	69.5	63.6	58.8	49.6	48.9	57.6	72.2	64.0	60.7
Pisa	44.0	48.1	51.5	56.3	63.8	70.6	77.5	77.5	73.5	62.6	52.3	47.0	46.0	57.2	75.2	62.8	60.6
Genoa	41.6	47.5	51.1	60.3	64.4	73.5	75.1	76.5	73.2	64.7	51.0	45.6	44.6	58.6	75.0	62.9	60.4
Toulon	40.0	44.0	48.0	55.0	68.0	70.0	74.0	79.0	64.0	62.0	51.0	46.0	43.3	53.7	74.3	59.0	59.9
Marseilles	51.8	45.1	49.1							58.2	50.4	46.6	46.6	57.6	72.5	60.1	59.5
Nice	43.8	49.0	51.4	57.0	63.0	69.0	73.6	74.3	69.4	61.8	53.7	48.6	47.8	56.2	72.3	61.6	59.5
Florence	41.0	45.0	48.0	56.0	64.0	69.0	77.0	76.0	70.0	59.0	53.0	47.0	44.3	56.0	74.0	60.7	59.0
Port Philip (N. S. W.)	67.6	68.9	65.7	58.6	55.6	50.9	49.2	50.1	54.5	58.2	62.5	65.9	50.1	58.4	67.5	60.0	59.0
Auckland (N. Z.)	67.9	67.3	64.2	60.5	54.7	51.4	49.0	51.7	54.0	56.4	60.1	63.9	50.7	56.8	66.4	59.8	58.4
Avignon	42.0	43.5	50.5	55.0	66.0	72.0	76.0	76.0	67.0	60.0	50.0	43.3	42.6	57.1	74.7	59.0	58.2
Montpelier	42.0	45.0	47.0	53.0	60.0	67.0	72.0	75.0	71.0	61.0	52.0	46.0	44.2	53.3	71.3	61.3	57.6
Pau	41.2	43.6	48.8	51.8	61.6	68.2	70.6	73.4	67.4	58.2	46.6	42.8	41.8	54.1	70.7	57.4	56.2
Sienna	39.7	40.2	46.2	53.7	62.4	67.5	72.8	72.3	66.0	58.3	47.1	41.7	40.5	54.1	70.8	57.1	55.6
Baths of Lucca															68.2		55.0
Paris	35.6	40.5	43.5	49.6	58.1	62.5	65.7	65.2	60.4	52.4	44.2	39.2	38.4	50.4	64.5	52.3	51.5
*Jannes													49.6	51.4	73.0	61.0	59.9
*Valencia													50.7	63.0	75.3	66.0	63.8
*Gibraltar													58.0	66.0	77.0	64.0	60.0
*Lisbon													54.0	59.0	68.0	59.0	61.0
*Mexico													53.6	63.4	65.2	60.1	60.6
*Jerusalem	49.4	54.4	55.7	61.4	73.8	75.2	79.1	79.3	77.0	74.2	63.8	54.5	52.8	63.6	77.9	71.7	66.5

*Added to the table by Sergeant Barwick.

REVOLVING STORMS.

The following article on revolving storms, etc., was published in the San Francisco Daily "Call," April 2, 1889, the article being furnished that paper by Lieutenant H. P. McIntosh, of the Hydrographic Office, in the Merchants' Exchange, San Francisco, with a few notes added by the Lieutenant. The article is intensely interesting, and well worthy of careful perusal and close study:

REVOLVING STORMS—HOW DO THEY OCCUR, AND WHAT GOVERNS THEIR MOVEMENTS—PECULIARITIES OF SAMOA—ILLUSTRATION OF HOW THE WIND REVOLVES TOWARD THE CENTER OF LOW BAROMETER.—The recent meteorological phenomenon at Samoa has opened a field of inquiry with reference to hurricanes, tornadoes, typhoons, or by whatever name they may be classified, that will probably result in a more careful study of the causes, tracks, and influences than ever before. All information at this time is obscure, and, in a great degree, speculative. It has been established, however, that all are in a greater or less degree cyclonic, and that while they may be moving ahead at the rate of from eighteen to twenty miles an hour, the current within the air whirlpool is of terrific force. The nearer the center of the vortex, the greater the velocity.

AVERAGE VELOCITY.

The average velocity of the cyclone varies greatly, not only in different parts of the world, but in the same localities, and at the same season of the year. The size of a cyclone does not afford any rule whereby to estimate its rate of traveling, as both large and small ones are known to move with great rapidity, or at moderate or slow rates, without, apparently, any sort of law. It has been conjectured that the vortex below was carried forward by currents of wind above; but it is objected to this that the upper strata of clouds are often seen, through breaks in a storm, to move across or against the track of the cyclone, which itself has a track against the prevailing winds, as in the Atlantic hurricanes, moving to the east against the trade winds, the track of one having been observed for a distance of three thousand miles; or oblique to them, as the hurricanes of the Southern Indian Ocean, moving to the westsouthwest across the southeast trade.

These facts leave observers completely in the dark as to what causes their progressive motion, and also as to what causes their violent gyrations. This state of feeling is intensified by the fact that, like sandstorms or dust whirlpools, they will sometimes remain stationary for hours, and even for a day or more, moving at a rate of one fifth to two miles an hour, and then start off on a track upon which their size and velocity gradually increase. Usually they diminish in velocity in passing over land, and particularly if it is high land.

According to Redfield the West Indian and North American cyclones range from nine and five tenths miles an hour to forty-three miles. This would make a mean rate of about twenty-six miles. In the Southern Indian Ocean Thom estimates the rate of traveling to be from nine and ten minutes to a little more than two miles an hour. Colonel Reid, in his chart of the cyclone of 1809, lays down from seven to twelve and one half

miles per day. Piddington says that cyclones are of slow progression, being from two and three fourths to one and one fourth miles per hour on a singularly calm track. In the Mozambique Channel, Boyne, in his cyclone of 1838, lays down ten miles an hour. In the Arabian Seas the rate of progression is placed at from four to sixteen miles an hour. In the Bay of Bengal, Piddington estimates the progress at from a little over two to thirty-nine miles an hour, although from three to fifteen may be taken as the usual rates. The cyclone which traveled at the low rate of but little over two miles an hour (fifty-three miles in twenty-four hours) was the tremendous one which inundated Burisal and Backergunge, at the mouth of the Burrampooter and the Ganges, in which over fifty thousand persons lost their lives, and a vast amount of property in houses, cattle, and other things was lost.

In the Andaman Sea, the usual rate of a cyclone is four miles an hour. Off the coast of Ceylon they average from five to ten miles an hour, or more. In the China Sea, the rate of progression has been estimated at from seven to twenty-four miles an hour. The cyclone referred to came under the head of "stationary cyclones," and their periodicity and favorable opportunities of making observations enable the statistician to give approximately accurate data with regard to the peculiarities of the meteors. So far, unfortunately, the means of observation in the Pacific have been less favorable, and comparatively speaking but little is known of the habitat of the cyclone. There is no doubt, however, of the frequency of the occurrence between the Samoan group and the Friendly Islands, although there is more frequent damage done on the latter than on the former. The track of the hurricane appears to be between the groups.

CLIMATIC PECULIARITIES.

The Governments of the United States and Great Britain have gathered and collected all information in any way appertaining to climatic, hygienic, and meteorological phenomena belonging to the Samoan Islands, and from the various reports may be gathered a vast amount of information that will be of interest to the general student. That any light will ever be thrown upon the immediate cause of a cyclone is a matter of extreme doubt. So far, it has been extremely difficult to ascertain the near approach of a tornado, so as to be able to guard against its effects. An English authority, speaking of the climate of Samoa, says:

"The climate of the islands may be termed variable, and there is much bad weather, particularly during the winter months, when long and heavy rains, attended at times with high winds and northerly gales, are frequent. Destructive hurricanes also occur, sometimes blowing down the towns and destroying the houses. Although these severe hurricanes do not happen very frequently at the Samoan Islands, yet it is probable that they occur very frequently between them and the Friendly Islands, where scarcely a season passes without some of the islands suffering from one of these awful catastrophes."

HURRICANES IN THE PACIFIC.

The same authority speaks of the hurricanes of the Pacific in the following language:

"In the Pacific, like many other of the phenomena there met with, the recorded observations on hurricanes or typhoons are too scanty to have drawn up any regular system for them; so that for the present it remains

for the navigator to apply 'the law of storms' as developed in the Atlantic and Indian Oceans to these same meteors in the Pacific, and almost without question they will be found accordant, in most instances, with that law.

"In the Southern Pacific we have a groundwork to assert the character and occurrence of the true cyclones, and as Mr. Piddington states almost all that need be said on the subject, we quote his words:

"In the tropical regions of the South Pacific, from the barrier reefs of Australia through the numerous groups of islands to the low archipelago, and perhaps even to near the coast of South America, and from the equator to latitude 25° south, there is no doubt that true hurricane storms (cyclones) occur of as great violence at least as those in the North Pacific; but from the scattered accounts of single ships, as also of missionary residents on the various islands, we cannot say anything positive as to their tracks, though they appear to come from the eastward among the islands, and sometimes to curve to the southward. The following are a few notes. The seasons at which they prevail seem also to be the same as those of the Mauritius and Bourbon:

"At Viti-Leon, in the Fiji group, in February, 1841, a well-defined circular storm (cyclone), tolerably observed, seemed to have moved to the southward, and, though it lasted four days, was not felt at Tonga, eight or ten degrees to the southeast of it.

"At Apia harbor, in the Samoan group (Navigators' Islands), latitude 14° south, on the sixteenth day of December, eighteen hundred and forty, a true hurricane storm (cyclone), of great violence, with a fall of four inches of the mercury (by a damaged barometer) was observed, moving from the north to the southward; and, four years previous, another, also well defined, moving from the northeast to the southeastward, the change of wind being from southeast to northwest. The space between the Samoan (Navigators') Islands and Friendly Islands is said expressly to be subject to violent hurricanes, and that scarcely a year passes without some of the Friendly Islands suffering from them. Their violence is such that many of the American whalers have been made complete wrecks of by them; two were lost about 1842 (year uncertain) at the Navigators' Islands.

"At the Kingsmill group, on the equator, violent storms, which appear to be typhoon-like, are experienced.

"At Vavroo, in the Friendly Islands, latitude 19° south, longitude 173° west, in 1837, the American whaler Independence was driven on shore by 'a hurricane,' and taken off by a shift of wind.

"The account of the storm at Raratonga, in the Hervey Islands, in latitude 19° south, longitude 160° west, described by Mr. Williams and quoted by Colonel Reid, gives us, unfortunately, nothing further than the certainty that hurricanes (cyclones) prevail there at times."

Without quoting literally from this authority any further, from the same authority are collated the facts that in December, 1842, H. M. S. Favorite, between Tahiti and Mangeea, met with a rotary storm; in February, 1840, a cyclone, bearing southwestward, visited the Bay of Islands, New Zealand; July 28, 1849, H. M. S. Buffalo was wrecked in a heavy gale, which lasted three days, at Mercury Bay, New Zealand; rotary storms have been experienced between Van Diemens Land and Cape Horn; a heavy gale off Cape Tres Puritas, April 5, 1882; another in the same latitude and longitude, April tenth of the same year; one swept the Bay of Camavos to the Island of Desegada in May, 1846, during which twelve English and American vessels were lost. The record from which this data is taken, "Hurricanes of the South Pacific Ocean," by Alexander George Findlay, F.R.G.S., mentions the circumstance that in every instance where it was possible to

make observations these storms were rotary in their character, vessels being driven all around the compass in a gale, the course being from left to right. Information with reference to storms between 20° south of the equator and the Gulf of California is deficient. The conclusion is drawn, however, that the storms on the coasts of Nicaragua, Guatemala, and Mexico, are connected with the Gulf of Mexico, or perhaps originated there.

NOTES ON REVOLVING STORMS.

Diagram A—The spiral lines illustrate the circulation of the wind in a tropical cyclone, northern hemisphere. In the southern hemisphere the circulation takes place in the opposite direction. The diameter of the area represented may vary in different storms and in different latitudes from about one hundred to about eight hundred miles, and is generally least in low latitudes. The air is drawn in toward the center of low barometer, gradually takes up a more and more circular path as its velocity increases, and finally whirls around the center with hurricane force. At the center is a calm spot from ten to thirty miles in diameter; this is marked low, and here the lowest barometer is obtained. It will be noticed how similar the motion is to that of water in a whirlpool or eddy, and very naturally, as this is nothing but a gigantic whirlpool in the atmosphere, and the suction or draught at the center upward instead of downward.

The direction of the wind at any point on this diagram is the same as the direction of the curve at that point, and the arrows show this direction at the point where they are plotted. By plotting arrows at all points having the wind from the same direction—north, for example—and joining them by a dotted line, we find that this dotted line curves toward the center, as shown. The angle of bearing of the center, therefore, gradually decreases from about ten points at the margin to about eight points in the inner whirl, where the well known “eight-point rule” becomes true.

Diagram B—Here the dotted lines are drawn from each wind arrow at the margin to the center, in the way explained above, so that to find the direction of the wind at any point, follow out the dotted line to the margin, and read it there. The circles are isobars, and the barometer falls twenty one hundredths of an inch as you go from one of these circles to the next inner one. This illustrates very clearly the rate at which the barometer falls as you approach the center; first slowly, as the broad outer ring is traversed, then more rapidly.

Near the center, where the isobars are very close together, it has been known to fall an inch in fifty miles. Of course, as you recede from the center, the barometer rises .20 of an inch as you pass from one isobar to the next outer one, just as it fell on entering the hurricane. This diagram involves as much of our latest knowledge of cyclones as can be safely used as a general guide, and extends out beyond the regions where the barometer is falling rapidly and the wind and sea have become violent. These diagrams and the accompanying explanations only indicate how you may plot your position on the diagram, and obtain from it the probable bearing and distance of the center, and the track and velocity of the storm, leaving it to yourself to decide what action to take, having proper regard to the strength and speed of your ship, the lay of the land, and the passage you are making.

Practical use of Diagram B: Suppose that at 4 P. M., for instance, the wind is E.S.E., and the barometer .20 of an inch below the normal. Find at the margin of the diagram the wind arrow marked “E.S.E.,” and follow the dotted line in towards the center as far as the isobar marked “.20 of

an inch below the normal;" this intersection (marked "a") is your position on the diagram; for, by the method of construction just explained, this is the place, and the only place, where the wind is E.S.E., and, at the same time, the barometer .20 of an inch below the normal. Referring to the compass and scale which accompany the diagram, you will find that the center (low) bears S.W. by S., distance two hundred and fifty-two miles. Plot this position of the center on your track chart from the 4 P. M. position of your vessel.

Later in the day, say 8 P. M., suppose that the wind is S.E. by E., and the barometer is .30 of an inch below the normal (having fallen .10 of an inch in the interval): With this wind your position must be half way between the dotted lines leading in toward the center from the arrows marked "S.E." and "E.S.E.," and with this barometer reading it must be half way between the isobars marked ".20" and ".40" below the normal; it is, therefore, at the point marked "b," and the center bears "S.W.," distance two hundred miles. Plot this 8 P. M. position of the cyclone center on your track chart from the 8 P. M. position of your vessel.

You have thus the position of the cyclone center at 4 P. M. and at 8 P. M. plotted on your chart, and the dotted line joining the two positions is the track of the center and the distance it has moved in four hours.

Suppose, again, that at 10 P. M. the wind is still from S.E. by E., but the barometer stands at .40 below the normal, having fallen .10 in two hours. Your position is now at the point marked "c" on the diagram, found by exactly the same course of reasoning as before, and the center now bears S.W., distant about one hundred and seventy-five miles. Plot this 10 P. M. position of the center on your track chart, from the 10 P. M. position of your vessel. If you have been lying-to, this will evidently indicate that the storm's track has recurved, and that you are directly in front of the center. But, no matter whether you have been lying-to or not, your vessel's track and the track and position of the cyclone center are both plotted on your chart, and you can closely watch every change in relative position in order to avoid the center and dangerous semicircle of the hurricane.

NOTES ON REVOLVING STORMS.

The subject of revolving storms, cyclone, hurricane, or tornado, has been made the subject of a special bulletin of the Branch Hydrographic Office of this city. The information is for the special benefit of mariners, and it will be to their interest to note carefully the statements therein contained, and they can compare them with their experience. The following are the notes:

EARLIEST INDICATIONS.

Barometer above the normal, and continuing so quite noticeably for several days, with dry, fresh, fair weather and uncommonly transparent atmosphere. The formation, in increasing quantities, of light, feathery, cirrus clouds, and the setting in of a long, low, ocean swell from the direction of the approaching storm. The long lines of filaments of cirrus clouds also often indicate the bearing of the storm-center while it is still hundreds of miles away, as they radiate from it on every side. As the cirrus clouds gradually thicken, halos begin to appear about the sun and moon, and the ocean swell increases.

UNMISTAKABLE SIGNS.

As the sky becomes overcast with a light vail of cirrus clouds, with halos and rings about the sun and moon, the barometer begins to fall, slowly but steadily. The atmosphere loses its pleasant freshness and seems very heavy, hot, and moist. Dark red and violet tints are seen at the rising and setting of the sun, deepening in intensity day by day. Soon the cloud bank of the storm appears on the horizon like a distant mountain range, the barometer falls more rapidly, the wind freshens, and the first nimbus and cumulus clouds appear, with light squalls and passing showers.

GENERAL RULES.

Watch carefully for the earliest indications of the approaching hurricane; constantly and carefully observe and record the barometer, thermometers, wind, and weather. When one is evidently approaching, heave-to, carefully make and record your observations every half hour, or even more frequently; make every effort to find the probable bearing of the center, direction in which the storm is moving, and the semicircle you are in. Unless you heave-to when thus observing the fall of the barometer and the shifts of wind, you may be led into serious error; a fast steamer, for instance, may run into the dangerous side of a hurricane and yet get shifts of wind characteristic of the navigable semicircle. Any attempt to cross the storm track is dangerous, but should you decide that it must be attempted, crowd sail and keep the wind well on the starboard quarter, if in the Northern Hemisphere, or on the port quarter, if in the Southern Hemisphere. If obliged to lie-to, always do so on the coming-up tack; in the dangerous semicircle this will be the starboard tack in northern latitudes, and the port tack in southern latitudes; the ship will head away from the center, and you should make all the headway you can; in the navigable semicircle it will be the port tack in northern latitudes, and the starboard tack in southern latitudes; the ship will head toward the center, and you should make as little headway as possible. In scudding, always keep the wind on the starboard quarter, if in northern latitudes, but on the port quarter if in southern latitudes, in order to run out of the storm. So long as the barometer continues to fall the center is getting nearer; when it steadies and begins to rise, this marks the nearest point, and here the shifts of wind will be most sudden and violent, and the sea highest and most confused. If when lying-to the wind begins to shift in a direction opposite to what it did at first, it is evident that the storm track is recurving, and that your semicircle has changed. Immediate action must be taken to suit the new conditions. But if your vessel is making any great headway, it may give you a shift of wind contrary to what you would have if lying-to. This must be borne in mind. In West Indian hurricanes cool weather is characteristic of the navigable semicircle, owing to the indraft from the northwestward; warm weather, on the contrary, indicates the dangerous semicircle, where the air is drawn in from the southeastward.

There are two cyclone currents to be considered—a current moving in a circular direction around the center, caused by the wind, and a current which follows the storm along its track. These vary considerably with different storms, but should always be taken into account when near the coast.

The rule for the determination of the semicircle is the same for both hemispheres; if the wind shifts to the right, that is, from north towards east, from east toward south, and so on, you are in the right semicircle; if

it shifts to the left, that is, from north toward west, and so on, you are in the left semicircle. In northern latitudes the right is the dangerous semicircle, and the left the navigable semicircle, but in southern latitudes the case is reversed, the left becoming the dangerous side and the right the navigable side. The following are general rules for guidance under ordinary circumstances:

In northern latitudes, right semicircle.—Haul by the wind on the starboard tack and carry sail as long as possible; if obliged to heave-to, do so on the starboard tack.

Left semicircle.—Bring the wind on the starboard quarter. Note the direction of the ship's head and steer that course. If obliged to heave-to, do so on the port tack.

On the storm track, in front of the center.—Square away and run before it. Note the course and keep it; trim the yards when the wind draws on the starboard quarter. If, however, obliged to heave-to, do so on the port tack.

In rear of the center.—Run out with the wind on the starboard quarter, or heave-to on starboard tack.

In southern latitudes, right semicircle.—Bring the wind on the port quarter. Note the course and keep it. If obliged to heave-to, do so on starboard tack.

Left semicircle.—Haul by the wind on the port tack. Carry sail as long as possible, and if obliged to heave-to, do so on port tack.

In front of the center.—Run before it. Note the course and keep it, and trim the yards as the wind hauls on the port quarter. If obliged to heave-to, do so on starboard tack.

In rear of center.—Run out with wind on port quarter or heave-to on port tack.

All of the above maneuvers depend, of course, on the amount of sea room and the ability to carry sail. If sail cannot be carried or land interferes, the ship should be hove-to on the starboard tack in the right semicircle, and on the port tack in the left semicircle, and never otherwise, no matter what may be the latitude.

The following, compiled from information on file in the Hydrographic Office, is supplementary to what was published in a special bulletin in 1888, having reference more particularly to storms in the Northern Hemisphere:

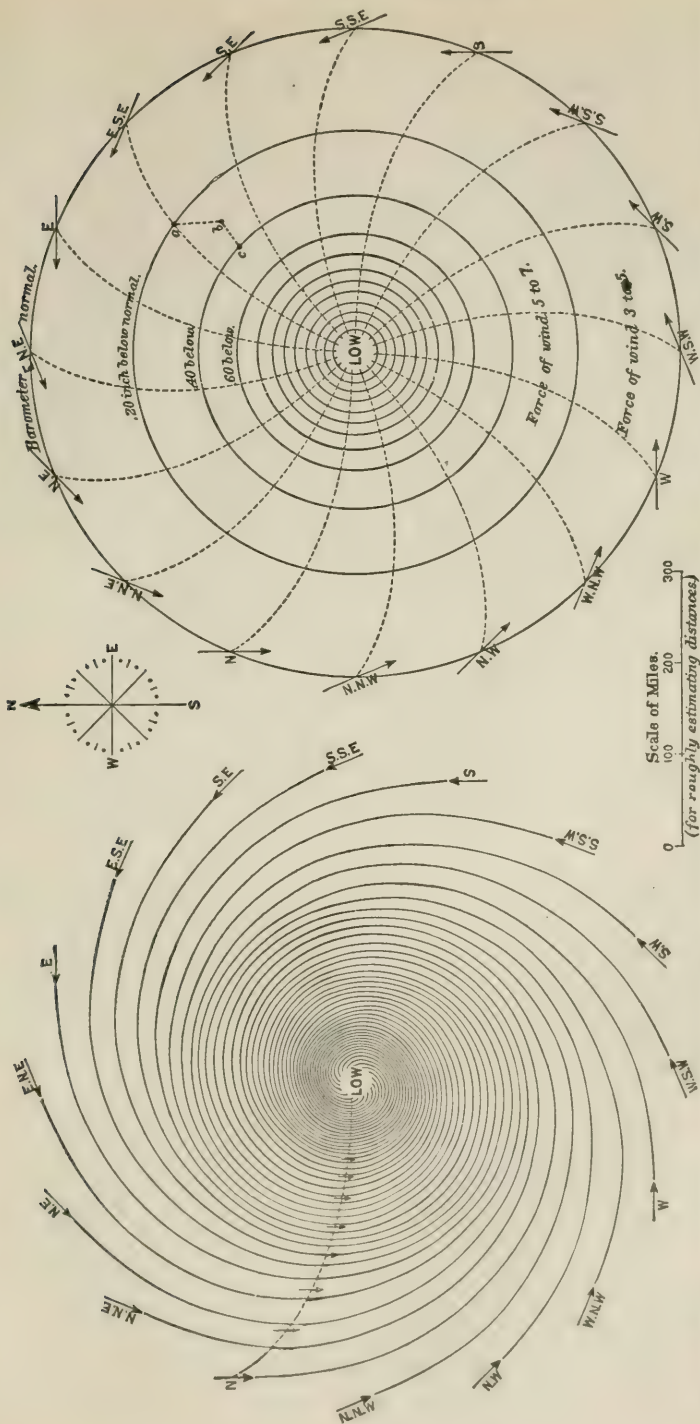


DIAGRAM A.—Illustrating the circulation of the wind around and toward the center of low barometer in a tropical cyclone, Northern Hemisphere. The dangerous winds occur in the inner whirls.

CORRECTIONS, ETC., OF THE ABOVE ARTICLE AS FURNISHED BY LIEUTENANT H. P. McINTOSH, U. S. NAVY, AND OFFICER IN CHARGE OF THE U. S. BRANCH HYDROGRAPHIC OFFICE, SAN FRANCISCO.

SIR: I inclose you a copy of a "Bulletin" issued by this office, which contains some notes on revolving storms. Increased knowledge of the subject has made it necessary to modify somewhat the instructions for maneuvering in the rear of a cyclone. We find that in the rear of a cyclone, not only in the tropics, but in the temperate zones, the wind blows almost directly toward the storm center; so that it would be better to heave-to and wait for the cyclone to recede, in the meantime watching the shifts of wind to see that the storm is receding and not recurving; it might even be better to stand off close-hauled on the tack opposite to that recommended by the "Bulletin." The conclusions of the "Bulletin" were derived from the diagrams, which are, of course, only general, and not applicable as a guide for action in the rear of a cyclone. The trouble is that it is impossible to represent by a single diagram that the winds are more in-blowing in rear, because the rear is east in low latitudes; south in middle latitudes in the northern hemisphere; north in middle latitudes in the southern hemisphere; and west in high latitudes. To do so would require three diagrams for each hemisphere.

Very respectfully,

H. P. McINTOSH,
Lieutenant U. S. N., in Charge.

THE SAN FELIPE SINK, SAN DIEGO COUNTY, CALIFORNIA, AND ITS INTERESTING DETAILS AS A HEALTH RESORT.

The following article was taken from the "American Meteorological Journal" for March, 1889, published by Professor M. W. Harrington, Director of the Astronomical Observatory, Ann Arbor, Michigan:

Dr. Walter Lindley, in the "Medical Record," gives an interesting account of this tract, which lies below sea level. Dr. Lindley discusses it from the therapeutic point of view, claiming that in it the patient can get the curative effect of compressed air. As to its physical peculiarities, fauna, and flora, Dr. Lindley says:

Dr. J. B. Widney, of Los Angeles, while surgeon in the United States Army, crossed this region with troops twenty-one years ago. He then noticed surrounding this territory a well-defined line along the mountain sides, always at the same level. Above that line the rocks are sharp and jagged, showing that for ages the water had stood at that level. He says: "I found it to be the old beach of a sea." I find nothing else noted of this country until the surveying party of the Southern Pacific Railroad, in running the line from Los Angeles to Yuma, found that sea level was at the point where Dr. Widney had noted the ancient beach. They then gradually descended to the south until they reached a depression of two hundred and sixty-eight feet below sea level, at a point near Salton.

This basin is about one hundred and thirty miles in length by thirty miles in average width. The deepest point is about three hundred and sixty feet below sea level. Along the northern margin of this basin, right up against the mountains, are great numbers of date palms. These tropical trees are indigenous to this valley, and many of them reach a height of eighty feet. When ripe, a single bunch of the fruit weighs one hundred pounds. It has a taste very similar to the date palm of commerce. The tree has large fan leaves, and is the same as can be seen in almost every park and yard in the towns of Southern

California. The passenger on the Southern Pacific Railroad, by glancing out of the north side of the car at Indio, can see these giant sentinels keeping silent vigil over the plains beneath them.

At Salton, on the Southern Pacific Railroad, the surface of the earth for nearly ten miles square is covered with a crust of salt from four inches to a foot thick. I stopped there in midsummer, and went out on this great white field about noon. The mercury indicated 105 degrees Fahrenheit in the house, but out in the sunshine, with the dazzling reflection from the glistening surface that extended for miles on each side, the temperature was probably 130 degrees Fahrenheit. The workmen out in this peculiar harvest field were as cheerful as any set of men I ever saw, and there was far less exhibition of suffering from heat than is to be seen, ordinarily, in July in the wheat fields of the Mississippi Valley. The low relative humidity explains the total absence of sunstroke here. The atmosphere in this region, adulterated by the chlorine gases emanating from the salt beds, must be nearly aseptic. There are extensive mills here for grinding the salt. It is not put through any system of purification, but, after grinding, proves to be excellent for table use. Several hundred tons are thus prepared every month, and shipped away.

A few miles east of here are the famous mud volcanoes, which are equal in wonder to the geysers of this State. Owing to the treacherous character of the ground around them they have never been thoroughly examined. Professor Hanks, the State Mineralogist, undertook it, but, breaking through the crust, he was so severely burned that he was compelled to abandon his investigations. Here is an extensive, almost unexplored field for some adventurous scientist.

Indio is the place to stop and make headquarters for tours through this interesting country. It is the principal station in the valley, and is near the northern rim of the basin, being only twenty feet below sea level. The sandy plains around Indio were formerly considered a hopeless barren waste, but the advent of the railroad has made great changes. Good water is supplied by surface wells; but in order to have water for irrigation, artesian wells have been bored. There is one, two and three fourths miles east of Indio, that is now flowing one thousand gallons per hour. This flowing water was reached at a depth of only one hundred and fifteen feet, after boring through layers of sand, clay, sand, tough blue clay, clay, coarse gravel, clay, and sand. Oranges and various other kinds of fruit are being grown here, and melons, tomatoes, and berries ripen several weeks earlier than at Los Angeles and other places near the coast. There are in this vicinity about forty thousand acres of excellent land. The visitor here, on witnessing the water flowing from the artesian wells, the grass growing, the melons ripening, and the peach trees blooming, can fitly say with Isaiah: "The Lord shall comfort all the waste places. He will make the desert like the garden, and the desert shall rejoice, and bloom as the rose. For in the wilderness shall waters break out, and streams in the desert. And the parched ground shall become a pool, and the thirsty land springs of water."

In this valley live about four hundred of the Cahuilla Indians. This is an interesting tribe. Dr. Stephen Bowers, in a paper read before the Ventura County Society of Natural History, March 5, 1888, said that he believed them to be of Aztec origin. They are sun and fire worshippers, and believe in the transmigration of souls, and that their departed friends sometimes enter into coyotes, and thus linger about their former habitation. They practice cremation. Their principal article of food is the mesquit bean, which they triturate in mortars of wood or stone, after which the meal is sifted and the coarser portion is used as food for their horses and cattle, and the finer is made into cakes for family use.

The agave, or century plant, which is indigenous here, is also much used for food. The roots, roasted, taste like stewed turnips, while the stem, roasted, is said to taste like baked sweet potatoes. From this plant they also make the Mexican beverage, *pulque*, which has about the same alcoholic strength as beer. The ethnologist can, by gaining their confidence, get much interesting information from these very peaceable Indians.

I found at Salton and Indio asthmatics, rheumatics, and consumptives, all of whom reported wonderful recoveries. Some of these stories I accepted *cum grano salis*, which quotation is, by the way, especially applicable to the salt fields. These asthmatics and consumptives claim that the further they get below the sea level and the drier the atmosphere, the easier they breathe. The rheumatics claim that the heat and dryness improves the circulation, and thus relieves them.

Among other places below sea level, Lindley notes the sink of the Amorgosa (Arroyo del Muerto), in eastern California, two hundred and twenty-five feet below sea level. The Caspian Sea, eighty-five feet below sea level. Lake Assal, east of Abyssinia, in the Afar country, eight miles long and four miles wide, is about seven hundred and sixty feet below sea level. Its shores are covered with a crust of salt about a foot thick.

WEST INDIAN HURRICANES AND THE MARCH BLIZZARD OF 1888.

From "Forest and Stream."

On February 9, 1889, a most interesting lecture was delivered by Ensign Everett Hayden, U. S. N., in charge of the Division of Marine Meteorology of the U. S. Hydrographic Office, before the Seawanhaka Corinthian Yachting Club, the subject being "West Indian Hurricanes and the March Blizzard." The lecture was very fully illustrated by a series of lantern slides prepared from Mr. Hayden's diagrams and exhibited by Mr. William T. Buckley, a member of the club. Through the kindness of Mr. Hayden we are enabled to give the following abstract of his lecture, its length being too great to allow its publication in full:

As a lecture, to be delivered at a future time, will be devoted to the general subject of winds and storms, a very much more comprehensive one than that now under consideration, it is to be hoped that a somewhat detailed description of the terrific tropical cyclones that devastate the West Indies and advance upon our Gulf and Atlantic seaboard will be a fitting introduction to a broad general outline of the meteorology of the globe, to which the present lecture is merely preliminary. Moreover, it was by the study of these very storms that an American, William B. Redfield, won imperishable renown and the everlasting gratitude of mankind by discoveries that have proved to be the very foundation stone of the great science of meteorology as it is known and practically utilized to-day, at sea and on land, in every ocean and continent of the globe to which the arts and sciences of civilization have access.

The first three slides, modifications of the familiar pilot charts of the North Atlantic, will serve to make clear the general distribution of barometric pressure and the circulation of the winds over the entire basin of the North Atlantic and the adjacent continents during winter and summer, together with the general paths followed by storms, and the regions where they are most prevalent and persistent. Special attention is called to the great persistent anti-cyclone, or area of high barometer, in mid-ocean to the southwest of the Azores, about which the general atmospheric circulation is in a direction with the hands of a watch, giving rise, below, to the well known steady northeast trades, and above, or to the northward, to the prevailing westerly winds along the transatlantic steamship routes—the "brave west winds" of the north temperate zone. Another marked feature is the permanent area of low barometer about Iceland, a great stationary cyclone about which the circulation of the wind is against the hands of a watch. To the southward, about the equator, lies what Maury has called the meteorological equator, the region of equatorial rains and calms at the meeting of the southeast and northeast trades, where the warm, steady trade winds, laden with moisture from their long travel over tropic seas, rise and precipitate their moisture, returning polewards as an upper current, to descend again to the surface and be felt as cool, dry, anti-cyclonic winds. The position of this great anti-cyclone in mid-Atlantic is the key to the meteorology of half the civilized world; the diagrams indicate its normal or average position, and illustrate how it follows that great monarch of climate, the sun, in his changes of declination, moving north-

ward in summer and southward in winter. But they do not illustrate the abnormal variations in its position, due to, we know not what, though we do know that the storms of America and Europe are guided by it, and the next great step in advance will be to turn this knowledge to practical account in our forecast of weather on the North Atlantic, and along its eastern and western shores.

In addition, then, to those permanent areas of high and low barometers, eddies or atmospheric whirls move along pretty well defined tracks, as indicated on the diagram; cyclones, or "lows" (in ordinary parlance, storms), sucking the air spirally inward and whirling it aloft, its moisture condensing into heavy clouds, with rain or snow; anti-cyclones, or "highs," returning the cool, dry air to the surface in outward blowing spirals, with cool dry weather and high barometer. The two storm tracks of spiral interest in this connection are: first, the Great Lake storm track, from west to east over the Great Lakes and down the St. Lawrence Valley; and, secondly, the West Indian hurricane track, westward in the tropics, then northward into the temperate zone, and eastward again in higher latitudes. Cyclonic eddies tend to move toward and unite with the permanent "low" near Ireland; anti-cyclonic, with the permanent anti-cyclone in mid-ocean. Upon these general laws, together with local modifications due to topographic relief ashore and the influence of the great ocean currents at sea, hang all the weather changes of the North Atlantic basin.

After this general view the lecturer said that he proposed to confine his attention to the western portion of the ocean, that portion which an eminent American scientist has well called the "Bay of North America." This term embraces all of the Atlantic west of the fiftieth meridian, from Newfoundland to the mouths of the Amazon, including the Caribbean Sea and the Gulf of Mexico. He did not propose, he said, to leave to a postscript what he himself regarded as by far the most important point that any thorough study of West Indian hurricanes and the March blizzard could possibly emphasize, namely, the tremendous commercial importance of this great Bay of North America. The area from the fiftieth to the one hundredth meridian west of Greenwich, and from the equator to the fiftieth parallel of north latitude, is destined to become, in the near future, the theater of the greatest political and commercial activity that the world has ever seen. Meteorologically speaking, it is a unit from the slopes of the Rockies and the Cordilleras of the Isthmus to mid-ocean, and from the shores of the Hudson Bay to Venezuela. Abercromby, the distinguished English meteorologist, has well said that the weather predictor "cannot explain the weather on any day without casting his eyes over the whole northern hemisphere and around the little hills and valleys which bound his own horizon." Urging his hearers to bear this in mind during his subsequent remarks, and promising to refer to the subject again, he went on to describe Redfield's great discoveries, the methods by which his results were obtained, and their immediate and practical effect in advancing meteorological knowledge and lessening the dangers of ocean storms.

Although it is now generally recognized that Redfield had reached his fundamental conclusions regarding the rotary character of storms, together with a motion of the whole system along a definite track, as early as 1821, yet his first paper did not appear in print till 1831, and was even then unaccompanied by the diagrams so necessary in the then state of knowledge, or rather ignorance, of the subject. Nevertheless, most of his earliest papers were accompanied by such full statements of methods and facts that any one could plot the observations on a chart and thus verify his conclusions for himself. To illustrate his method, therefore, Mr. Hayden selected one

of his later diagrams, entitled "Route of the Hurricane, October 4-7, 1844," and projected it upon the screen. Upon this chart Redfield had charted by means of arrows, plotted each one at its proper geographic position, observations of wind direction selected for certain fixed times from a large number of reports, extracts from ship's logs, etc., collected with infinite perseverance and care from as many sources as were accessible. Thus three sets of concentric circles are seen at a glance to represent the general size and character of the storm at noon of the fifth, sixth, and seventh of October, respectively. Moreover, the tracks of certain vessels are plotted, in order that the experience of each may be considered with reference to the circulation of the wind about the storm center and the gradual movement of the whole system along a curved track. Thus we have here on Redfield's chart as clearly and graphically as could be indicated from the data at his command by the most able meteorologists to-day, the whole theory and practice of all our modern synchronous daily weather maps upon which predictions and forecasts are based and spread abroad by telegraph and newspapers to form part and parcel of the daily life of millions of men in every land. October fifth, a cyclone central off the northern coast of Cuba, easterly gales in Florida, northerly in western Cuba, westerly in Jamaica, southerly in eastern Cuba. October sixth, cyclone central two hundred miles southeast from Hatteras, general circulation of wind about the same as before (against the hands of a watch), northeasterly gales from Sandy Hook to Hatteras, northwesterly gales from Hatteras to Cape Romaine, size of storm somewhat greater. October seventh, storm central about one hundred and fifty miles southeast from Halifax, increasing southeasterly gales on the Grand Banks, strong nor'wester between Cape Sable and Nantucket, storm area enlarging and intensity diminishing. How marvelously clear. What a perfect grasp of facts and what a grand practical generalization from facts to principles. It would, indeed, have been small credit to the age in which he lived had such self-evident truths failed to find ready acceptance and prompt appreciation.

The terrific violence of this hurricane was sufficiently indicated by the havoc it caused in the landlocked harbor of Havana, a port absolutely unrivaled for the security of its anchorage; in this ten hours' tragedy seventy-two ships foundered at their anchors—capsized, dismasted, driven ashore, annihilated by the fury of the hurricane. This is a splendid landlocked harbor, and in spite of all that human strength and skill could do aboard, the various vessels of a great fleet, fighting under every flag and allied against a common foe, were wrecked and shattered by the hurricane. Attention was called to a coincidence of marked importance between the date (1844) of this great storm, so fully and graphically explained by Redfield, and the very year that witnessed the completion and assured practical success of Professor Morse's telegraph line between Washington and Baltimore. Right here we have the two great practical discoveries upon which all modern telegraphic weather forecasts depend—the synchronous observations and records, and the electric telegraph which transmits them.

Without attempting to follow this gigantic whirlwind in its destructive path towards Hatteras and the Grand Banks, the speaker paused a moment to refer to Redfield himself, and read an extract from a very interesting letter from Rear-Admiral Thornton A. Jenkins, U. S. N. (at that time a passed midshipman), an officer whose distinguished record at home and abroad, in peace and in war, is well known to every student of American naval history. Admiral Jenkins describes Redfield as a quiet, retiring, and reticent man, but always eloquent and patient in explaining the great truths of his new—and in the then ignorance of the subject—startling theories.

It seems almost incredible that at that time the great majority of naval officers, even, utterly refused to believe in or even listen to any theories regarding storms at sea or on land, and regarded a barometer as more or less of a nuisance. As late as 1850, Admiral Jenkins, says a naval officer, who afterwards became one of the most distinguished heroes of the war, asked him if he put any faith in "that thing." "Why, when I was in the Gulf and at Vera Cruz," said he, "that d——d thing nearly set me crazy."

The next diagram shown upon the screen was one of Redfield's track charts, with the path of various hurricanes, illustrating as graphically as anything could well do the general limits of the great area already defined as the Bay of North America, the tracks along which these terrific cyclonic storms move in their majestic parabolic orbits from the tropics into the temperate zone, and the essential unity of the entire area, so far as any broad and rational scheme of telegraphic weather forecasts is concerned. This latter fact, however, was referred to and emphasized still more strongly later on, in connection with a full description of the physical and meteorological features of the Bay of North America, and the existing and proposed telegraph lines and cables, so it need not be referred to further here. Attention was called to the fact that, while some of these storms pursued a course about west by north across the Caribbean Sea and Gulf of Mexico, reaching the coast of Texas before recurving, others recurve in various latitudes, the greater number about the thirtieth parallel, following a path very nearly coincident with the course of the Gulf Stream, and approximately parallel to our Atlantic Coast line. Again, a careful study of the dates of even the comparatively few storm tracks plotted on this chart brings out the fact that the August hurricanes recurve well to the northward, about the thirtieth or thirty-third parallel, while those of October recurve in about the latitude of Cuba. These important general laws, dependent upon the change of the sun's declination, have been strongly confirmed by subsequent investigation, and were discussed in greater detail later in the evening. One other feature of this chart that was referred to particularly, was the notable irregularity in the track of the hurricane of August, 1887, which, after having already commenced to recurve in the usual manner, was unexpectedly deflected to the westward, striking the coast of Georgia at Darien. This circumstance the audience was requested to bear in mind in connection with similar deflections of certain recent hurricanes, when the principles governing such deflections would be fully explained.

The next diagram was a copy of the Pilot Chart of the North Atlantic Ocean for August, 1888, on which were plotted the tracks of all the August hurricanes on record, strikingly confirming the fact brought out by Redfield's chart, that these tracks are remarkably uniform, both in their general course and in the latitude where they recurve.

Diagrams from Colonel Reid's well known book on storms served to illustrate the way in which able, practical, and scientific men took up Redfield's ideas, and propagated his new and important theories among navigators, for their guidance at sea in avoiding altogether, or maneuvering successfully in ocean storms. Colonel Reid was an officer of the Royal Engineers of Great Britain, and his attention was first directed to this subject from having been employed at Barbadoes in reëstablishing the Government buildings blown down in the hurricane of 1831, when one thousand four hundred and forty-seven persons lost their lives in the short space of seven hours, in that little island alone; a striking commentary, in itself, of the destructive character of these gigantic tornado-like whirlwinds. The diagrams were especially graphic in clearly defining the broad belt or swath

described by a hurricane in its outward progress, the storm tracks previously referred to constituting merely the axial line of the belt. The first was a hurricane of August, 1837, and a graphic account was quoted, with illustrations, of a thrilling experience of the ship *Calypso*, typical of hundreds of similar cases in hurricanes in the West Indies and off our own coast in the past, and repeated every year almost before our very eyes. The *Calypso* was in about latitude 27° north, longitude 75° west, when a rolling swell, freshening northeasterly squalls, and other signs of a hurricane, would have warned a captain posted in the law of storms to square away and make the best of his way to an anchorage at Nassau or run around along the southern edge of the approaching cyclone. But this was before sailors knew anything about circular storms, and before the Hydrographic Office had spread broadcast over the world the marvelous results obtained by using oil to prevent heavy seas from breaking on board. The ship's decks were swept by the seas, her close-reefed topsail blown from its bolt ropes, hatches stove in, the vessel thrown on her beam ends, with yard arms in the water. With her crew of fifteen men clinging to the weather rigging, mastheads in the water, a furious hurricane dashing the waves over them in sheets of foam, and the vessel sinking beneath their feet, it seems hard to believe that any epitaph but "missing—lost at sea" would ever have been inscribed against their names. But truth is always strange, stranger than fiction. Upon cutting away the lanyards of the lower rigging the masts went by the board and the vessel slowly righted. As the gale moderated, jury masts and sails were rigged, and in two weeks' time, after the hardships and sufferings incident to such a condition, the gallant ship (what was left of her) came to anchor in the harbor of Smithville, North Carolina.

Another of Reid's diagrams gave the paths of two of the memorable hurricanes of October, 1780, as indicated by extracts from the logs of the many British frigates cruising in those waters at that time. The one that destroyed the town of Savanna la Mar, Jamaica, was particularly severe, and in the vicinity of that island four frigates were lost, three of them with all on board. The *Phoenix*, wrecked on the south coast of Cuba, had a terrible experience, and the long account of it by Lieutenant Archer, R. N., published in Reid's book, should be read in full, as no quotations could do it justice. One's feelings relative to the loss of this fine frigate, however, are somewhat tempered by the cool way in which Lieutenant Archer speaks of having chased a Yankee man-of-war a short time previously, which, "unfortunately," escaped in the darkness.

Two years later (1782) occurred one of the greatest naval disasters on record, and the lecturer said that—after referring to it very briefly in order to emphasize the vast importance to navigators of a knowledge of the law of storms, rather than with any desire to appall the audience with statistics—he would be obliged to omit all further reference to the accumulated records of the succeeding hundred years and devote to the immediate present what little time remained. The disaster referred to he quoted from Piddington's "Sailor's Horn Book," another of those classic manuals that have translated and made intelligible to rough practical men the great and important truths of pure science, whose lofty reasoning and diction would in themselves be as unintelligible as so much Sanscrit. Rodney's fleet and prizes, together with an immense convoy of merchantmen, in all ninety-two vessels, were overtaken by a hurricane off the Grand Banks in September, 1782; all preparations for bad weather were made and the fleet hove-to, but on the wrong tack. Frigates, prizes, and convoy were dismasted, sunk, scattered, abandoned; every man-of-war but one foundered, and upward of three thousand lives lost. Hove-to on the wrong tack. What an epitaph,

and what a lesson for posterity! Truly, "peace hath her victories no less renowned than war," and if Redfield has still no monument erected in his honor, it must be because he needs none.

Mr. Hayden then explained by means of diagrams prepared in his division, and published by the Hydrographic Office, the circulation of the wind in a tropical cyclone, northern hemisphere, upon a knowledge of which the proper handling of a vessel depends. As a good illustration, the experience of the United States steamer Juniata was cited. This vessel is now in New York harbor, having recently returned from China, where last September she encountered a severe typhoon during her voyage from Hongkong to Singapore. The diagrams illustrated graphically the structure of those great whirlwinds, so far as concerns the navigator, showing that while in the outer regions of the storm the wind blows spirally inward, in the central regions it rushes furiously around a calm spot called the eye of the storm, where there is a fearful pyramidal sea, the waves rising and falling in mountainous and irregular masses, oftentimes with a clear sky and bright sunlight to enhance the strange and unnatural calm in the midst of a ring where the wind is blowing a hurricane, the sea lashed into driving foam, and the sky of inky blackness. The diagram indicated how aboard a vessel to the right of a storm track, the wind shifts to the right (veers), and to the left it shifts to the left (backs). Directly in front of an advancing storm the wind remains steady in direction, but increases rapidly in force, with light scud and passing squalls. By means of these and many other characteristic indications the navigator can ascertain with considerable accuracy the bearing of the storm center and the approximate track and velocity of the cyclone. He is thus enabled to take such action as may be best adapted, considering the particular circumstances of the case, to avoid the most dangerous region of the storm, and as a secondary consideration take advantage of such winds as may help him on his course. One of the most important circumstances the practical navigator has to consider in dealing with a hurricane is the lay of the land, and, of course, the proximity of a dangerous coast must often prevent him from taking such action as would be most advantageous if there were plenty of sea room. In the case of the Juniata, Commander Wise stood away to the southward to avoid the typhoon, and at the same time make headway on his course to Singapore, and, finally, rather than cross the entrance to the Gulf of Tonquin, where the sea would be very heavy, hove-to in the lee of Hainan Island, and rode out the storm under a full head of steam. The fore storm-staysail, set to steady the vessel, was carried away, and four boats were torn from their davits. Hatches battened down, vessel shipped sea after sea, till oil was used in bags towed from the weather bow. Weather thick and misty, with continuous heavy rain. The critical examination and analysis of the action taken by steam and sailing vessels encountering such storms, under the many and constantly varying conditions that occur in actual practice, the rules that govern such action, and the results that follow it, furnish the very best, and indeed only, method of impressing upon masters of vessels the vital importance of this branch of their profession. Practical men want practical information, with concrete, definite examples drawn from real life, with details familiar to their own individual experiences. The lecturer was willing, he said, to submit this proposition to his audience, and to ask if such instances, taken from the records of the Hydrographic Office, with names, dates, positions, and all details given, were not infinitely more effective in impressing such facts upon the mind than some ideal imaginary situation gotten up to suit some particular line of argument, and, perhaps, never likely to occur in actual practice.

Now, the records of the Hydrographic Office contain hundreds—he might almost say thousands—of such reports, more complete, probably, than similar records in any other office in the world, and he regarded it as worthy of an earnest effort on the part of all concerned to see that means were provided for their publication and circulation among the hundreds of voluntary observers who have willingly contributed their time and services in taking and recording their observations day after day, month after month, and year after year, aboard vessels in every ocean of the globe.

To illustrate the special dangers of navigation in the West Indies, the birthplace and natural habitat of these terrible storms, a copy of one of the Hydrographic Office charts was projected upon the screen, and attention called to the intricate and dangerous character of navigation in these waters. Remembering the circulation of the wind in one of these cyclonic storms, it will be readily seen that every hurricane that skirts the West Indies and the Atlantic seaboard of the United States, is sure to put hundreds of vessels in danger of being driven on a lee shore, and lost beyond all human power of deliverance. Just such tracks were those followed by the two hurricanes of August, 1887, which were then exhibited, plotted from more complete and reliable data, by far, than have ever been collected in connection with any hurricanes on record. The tracks of only a few of the many vessels from which reports had been received were shown upon the same chart, and served to give some idea of the completeness of the data. Of these, the first originated off the coast of Africa, about the Cape Verde Islands, August thirteenth, and moved at a high rate of speed westward, across the Atlantic, recurving east of Florida, striking Cape Hatteras with furious energy on the twentieth, carrying havoc among the gallant fishermen off the Grand Banks on the twenty-second, and passing to the northward of the British Isles and coast of Norway on the twenty-ninth and thirtieth—a track more than seven thousand miles in length. What a tremendous engine of destruction!

“Let us,” said the speaker, “watch its original progress. Imagine to yourself a hot, sultry August day in the tropics, off the Cape Verde Islands, at about the northern limit of the belt of equatorial rains and calms, where the northeast trades have become fitful and irregular. The uniformity of the trade sky is disappearing, and the little masses of cumulus clouds that have flecked the sky from zenith to horizon gather together here and there, as if undecided what to do, and now and then rise in tall, massive columns, that grow before the eye and mount higher and higher, till one lazily wonders how high they will rise above their broad level bases before they reach some upper current that will scatter their beautiful crests and spoil their snow-white symmetry. In the distance an occasional dark mass is seen, from which heavy rain is falling, with sometimes a broad flash of sheet lightning. In one of the tall masses of cumulus, off to the westward, taller and more majestic than its mates, a slow gyratory motion can be detected, which, gathering strength, rapidly draws in the warm air from below, saturated with moisture, and sends it aloft into cooler and cooler regions, to add rapidly to the growing and darkening mass of clouds. A new feature catches the eye; long, graceful, snow-white, feathery plumes reach out at the top of the mass, projected against the deep, clear azure sky. Beneath them the sharp rounded, upper edges of the now dark and threatening cumulus begin to grow misty and indistinct, and the inner shafts of the radiating cirrus plumes are lost to sight in this now misty veil. Gradually faint, and then sharp, dark, horizontal lines appear against the cumulus, and rapidly grow into stratus clouds, as though a fine rain were falling and settling at the level. Below, the distant horizon is now obscured by heavy rain.

Off to the northeast some little trade-wind clouds are moving this way; watching them a moment, as they rise toward the zenith, some mysterious force over there to the westward seems to attract them, and their paths curve that way. What does it mean? you say, and looking in that direction you see more little patches of scud moving across from left to right, and notice that a breeze is springing up from the east, while the barometer is falling slightly, and the whole great mass of clouds is moving westward. A hurricane has had its birth, a great cycloic storm has started on its westward march toward St. Thomas, Hatteras, Cape Race, and Norway. One of our western tornadoes is to this monster as an electric light to the noonday sun, and all the tornadoes in the records of the Signal Office, rolled into one and added to it, would hardly add appreciably to its energy.

"Whirling along its ocean pathway at an average velocity of nearly twenty miles an hour, it sends out a long rolling swell a thousand miles in advance, and is heralded by long, high feathery plumes of cirrus clouds, radiating far beyond the slowly thickening cirrus veil that casts its pale halo over sun and moon, and at dawn the twilight envelops heaven and earth with an awful fiery glare, like the light of some great conflagration. Soon the massive leaden-colored cloud bank heaves in sight above the horizon, a great mountain range—Ossa piled upon Pelion—and flying scud forms overhead and drifts to leeward, not with the surface wind, but at a marked angle to the right, moving with the upper currents of the great whirlwind. At intervals fine misty rain seems to grow out of the air, and then vanishes again, and the squalls freshen. The barometer sinks lower and lower, heavy clouds cover the whole horizon, and the low distant moan gradually changes into the shrieks of a thousand demons wrenching at the stout masts and spars, tearing the strong canvas into shreds and fluttering pennants, hurling timber and masonry into heaps of shapeless ruins, driving wild breakers high up on land, and laughing to scorn the feeble strength of man. Suddenly a pause. Silence. Calm. The warm, bright sunshine of a summer day. A brief glimpse of heaven. And then another seeming eternity of hell. As is often the case, a second hurricane succeeded the first after a few days' interval, following approximately the same track." Time did not allow the speaker to go into any detailed description of either one, although each would be well worthy of a volume.

The lecturer then spoke briefly of his visit to Cuba during September and October, 1888, under orders from the Secretary of the Navy, issued at his own urgent application. These two months constitute the latter half of the hurricane season, and October is specially dreaded because of the fact, already mentioned, that October hurricanes recur in just the latitude of the island, which they cross from south to north, retaining all the furious intensity that marks their paths at sea. The very day that he sailed from New York the great September hurricane had just swept across the island from east to west, and was expected to recur across the peninsula of Florida and reach the Gulf Stream again off Hatteras. Diagrams were given to show the remarkable deflection of this cyclone toward Vera Cruz, and the track of another one that followed close after the first but recurved about as usual. Various diagrams and illustrations were given in the effort to convey some idea of the summer climate in the City of Havana, the historic, picturesque old Spanish capital of lovely Cuba, "la Perla de las Antillas," and to describe some of the leading results of the studies of Padre Viñes, the eminent Havana meteorologist, whose scientific ability, indefatigable energy, and unrivaled opportunities have linked his name so inseparably with all recent advances in our knowledge of these storms. Indeed, the lecturer had himself suggested coining the word "Viñess," to express

for our tropical storms what the word "typhoon" does for those of China, in honor and recognition of the distinguished services of his esteemed friend, the Director of the Meteorological Observatory of the "Colegio de Belen."

Regretting that his limited time did not allow him even to mention the many other incidents of his month's stay in Havana, Mr. Hayden returned to the subject of the deflection of hurricanes from their normal paths, a subject of infinite importance, both theoretically and practically. To select a case that admirably illustrated exactly what was meant, how and why the deflection took place, and the manner in which it was possible to anticipate and predict it, he illustrated by means of six synchronous weather charts, shown upon the screen together, the weather conditions at noon, G. M. T. (7 A. M., seventy-fifth meridian time), October ninth to fourteenth, inclusive, 1886, during which time one of the most severe hurricanes ever experienced in the Gulf of Mexico originated south of Cuba and west of Jamaica, recurved in the usual latitude, off Cape San Antonio; but then, completely foiling Padre Viñes' published predictions, turned to the westward, swept over the entire Gulf of Mexico and up the Mississippi Valley to Lake Huron and the St. Lawrence Valley. Only the other day a report was received from Captain José Riera, with graphic details regarding the loss of his vessel, the Spanish bark *Tres Auroras*, in the very vortex of this terrific storm about one hundred and twenty miles north of Cape San Antonio, and the marvelous escape of six of the crew—thirteen in all—after tossing about for four days on wreckage from his vessel. The charts showed that a strong anti-cyclone had prevailed over the middle Atlantic States, and that it was this that had blocked the track of the advancing cyclone and forced it westward before allowing it to go north, so that it eventually reached the Atlantic by way of the great lakes and the St. Lawrence Valley.

These same considerations were shown to have held good in other cases, notably that of the great Cuban hurricane of last September, and the comparatively recent hurricane that devastated our Atlantic seaboard the last few days of November, blocked in its northward progress by an anti-cyclone over the Gulf of St. Lawrence, and venting its baffled rage upon the Samana and a dozen other vessels, sent to the bottom with all on board, almost in sight of their homes, firesides, and friends. The physical explanation of this interaction between cyclone and anti-cyclone is simple enough, and lies in the fact that the fuel of the cyclonic furnace is warm, moist, ocean air, which ascends, precipitates its moisture, and is carried away in the upper atmospheric currents, to descend again in the anti-cyclone or "high" as cool, dry air. Just as a great forest fire changes its course when it meets a clearing and dies out or runs around it, so a tropical cyclone follows the lines where its fuel is most abundant, and rages with greatest intensity where the tropical sun and tepid ocean currents load the heavy atmosphere with moisture. In the words of Shakespeare, that immortal painter of the smiles and passions of nature and mankind, "The sun's a thief, and with his great attraction robs the vast sea."

Four synchronous weather charts, prepared from hundreds of reports received from vessels off our coast during the November hurricane, presented at a glance the most striking features of that great storm during the period of greatest intensity, and the progress or growth of the hurricane in the direction of heaviest rainfall was illustrated by a weather map for August 21, 1888.

The March blizzard, one of the most notable storms of the century, and of a very different type from those that had just been considered, was illustrated by means of six lantern slides, in colors, showing the progress from west to east of a long line or trough of low barometer, extending

from Hudson Bay to the Gulf of Mexico, moving toward the Atlantic at the rate of six hundred miles a day, in the form of a great arched squall, whose front was more than a thousand miles in length, in front southeasterly winds drawing supplies of warm, moist ocean air from far down within the tropics, and in rear a long battalion of cold, northeasterly gales, carrying temperature below the freezing point far down the line into Louisiana and Mississippi. The speaker dwelt upon the enormous increase in the energy of the storm when it reached the Atlantic, the terrific combat between Arctic and Gulf Stream forces, and the obstruction encountered by the center of the line in the form of a stationary anti-cyclone about Newfoundland. A track chart, giving the tracks of vessels, and a barometer diagram, illustrating the fluctuation of the barometer at selected positions ashore and at sea, were discussed, and it was stated that one hundred and thirty-eight vessels were blown ashore, sunk, or damaged along the coast of the United States north of Hatteras. Off the coast, west of the fortieth meridian, some twenty vessels were sunk or abandoned, among them the gallant New York pilot boats, Phantom and Enchantress, and the yacht Cythera, with all her brave crew—friends and fellow yachtsmen of his present audience and old members of the Seawanhaka Club. Among the abandoned vessels was the American schooner W. L. White, and this derelict vessel commenced a long, aimless voyage across the Atlantic, at the mercy of the winds and currents, with no hand at the helm by day and no lights at night to warn navigators of their danger. Ten months and ten days later, after wandering more than five thousand miles, she stranded on one of the little rocky islands of the Hebrides, off the northwest coast of Scotland, and has thus completed the last act of this great ocean tragedy.

The following conclusions were quoted from the speaker's monograph description of the great storm, recently published by the Hydrographic Office: "It has enforced in most unmistakable terms the importance, not only to our extensive shipping interests, but to the people of all our great seaboard cities, of the establishment of telegraphic signal stations at outlying points off the coast; at St. Johns (or Cape Race) and Sable Island, to watch the movement of areas of high barometer, upon which that of the succeeding 'low' so largely depends; and at Bermuda, Nassau, and various points in the West Indies and Windward Islands, that we may be forewarned of the approach and progress of the terrific hurricanes which, summer after summer, bring devastation and destruction along our Gulf and Atlantic Coast, and of whose fury this great storm is an approximate example and a timely reminder. Moreover, there are other important objects to be gained, in addition to the better forecasting of stormy weather off our coasts and along the transatlantic routes. Every edition of the Pilot Chart records the latest reported position of numerous derelict vessels and other dangers to navigation—submerged wrecks, buoys adrift, icebergs, and masses of field ice. But at present such reports are necessarily several days old, and the present positions of these dangerous obstructions must be roughly estimated, allowing for their probable drift in the interval of time that has elapsed since the report was made. There are recorded, also, the probable limits of frequent fog for the ensuing month and the regions where fog was most frequently reported during the preceding month. But general averages only give the regions where fog is most likely to be encountered; they do not and cannot attempt to state whether or no there will be a fog at a given place at a given time. But scientific research and practical inventive genius, advancing hand in hand for the benefit of mankind, have discovered not only the laws governing the formation of the dense banks of fog that have made the Grand Banks dreaded by naviga-

tors, but also the means by which certain facts may be observed, telegraphed, charted, and studied a thousand miles away, and the occurrence of fog predicted with almost unfailing accuracy, even while the very elements themselves are only preparing for its formation. By means of such predictions the safety of navigation along the greatest highway of ocean traffic in the world will be vastly increased—routes traveled yearly at almost railway speed by vessels intrusted with more than a million human lives and property of an aggregate value of fully a billion dollars.”

The lecturer closed his lecture by referring again to the commercial importance of the great body of water known as the Bay of North America, exhibiting diagrams that brought out very clearly to the entire audience the various features of greatest importance in connection with a comprehensive and effective system of telegraphic weather service for the benefit of the commerce of every nation frequenting these waters, as well as of the inhabitants of its coasts and islands, from Venezuela to Newfoundland. A photograph of a superb relief model, the property of E. H. Butler & Co., of Philadelphia, illustrated the general topographic relief—an essential feature in connection with meteorology; a chart of ocean currents indicated their important bearing on the subject, and a map of telegraph lines and cables, existing and proposed, showed that the shore and islands were joined by an almost perfect network, giving the most admirable facilities for an almost perfect system. The conclusion of Mr. Hayden’s paper was as follows:

“In apology for having detained you so long to-night, I must plead the tremendous importance of the subject you have chosen for my remarks, the vast field it covers, the completeness of the records and data at my command, and my own absorbing interest in the subject. Here in this great Bay of North America commercial interests are at stake of vastly greater importance than in any similar body of water in the world—interests involving every commercial nation. To the north are the British Provinces, already coöperating with our Signal Office, descendants of our own forefathers, and linked to ourselves by the strongest bonds of geographic position and commercial interests. Then comes this great Republic, just growing into the full strength of manhood, and reaching out the hand of peace and friendship, not of conquest, to all mankind. To the south, the Spanish American Republics and the greater and lesser Antilles, where almost every European flag is represented, and where the benefits of an efficient weather service, conducted by means of united efforts and well directed coöperation, would be enormous. The completion of the Nicaragua Canal will soon change the great routes of ocean traffic, and divert into these waters half the tonnage of the world. Coincident with my recent visit to Havana, a Department of Marine Meteorology, or a Marine Observatory, has been established under the direction of my esteemed friend, Captain Luis Garcia y Carbonell, of the Spanish navy; and the French and Spanish cable companies, with a broad minded and generous liberality, have granted him the franking privilege for his telegrams over all their lines. Will it be too much to hope that our own companies will grant us the same privilege over their lines from Key West to Havana, and to Tampico, Vera Cruz, and Progreso?

“Here at home we have a superb weather service, the admiration of the world—a fact I would call to the attention of that portion of the press that racks its brains to get up cheap jokes about it—but circumstances have compelled it to devote almost its entire attention to the pressing needs of our great inland States, and to almost neglect commerce and the seaboard. I was amused the other day to read of the anxiety shown by Lieutenant

Maury, when, in the full flush of the success of his great system of meteorological observation at sea, to have the system extended to the land: 'In my humble way,' said he, 'I have been advocating the establishment of a similar system of weather reports and telegraphic warnings, not only for the shipping, but for the farmers also of the United States.' Shades of Maury, look down upon us now, and lend the influence of your great name to help regain for your beloved shipping some small share of the benefits of the great system that you did so much toward organizing!

"I want to live to see the day when there is a first-order light at Hatteras Shoal, Mantanella Reef, and Hillsboro Inlet, in addition to the magnificent lights we have already, and when weather forecasts at least as good as those signaled off to shipping at Hongkong or in the Bay of Bengal are available to navigators at every prominent lighthouse and headland of the shores of the great Bay of North America, and I expect to do it, too. I intended to have read extracts from at least a few hurricane reports from vessels of our own build, and flying the stars and stripes—the thrilling experience of the steamship Knickerbocker, or Manhattan (two good old New York names), in these great hurricanes off our coast—but time forbids. I cannot forbear, however, from reiterating the fact that it is to an American that we owe the discovery of the law of storms in almost all the perfection and simplicity that we know it to-day—a discovery that has revolutionized meteorology and resulted in the saving of thousands of lives and millions of dollars' worth of property at sea. The empirical laws of Kepler in astronomy, the grand results in biology of Darwin's vast accumulation of facts, and the deduction therefrom in the hands of that great master, find their parallel in the thorough and painstaking work in collecting data, the scientific skill and insight in their consideration and comprehension, and the lifetime's devotion to this one subject, of Mr. Redfield, of New York."

TRANSACTIONS

OF THE

FIRST DISTRICT AGRICULTURAL ASSOCIATION

For the Year 1888,

Composed of the Counties of San Francisco, Contra Costa, and Alameda.

OFFICERS OF THE ASSOCIATION.

R. T. CARROLL	President.
JOS. I. DIMOND	Secretary.
UNION NATIONAL BANK (of Oakland)	Treasurer.

DIRECTORS.

R. T. CARROLL	San Francisco.
C. S. CRITTENDEN	San Francisco.
P. A. FINIGAN	San Francisco.
ROBERT McKILLICAN	Oakland.
P. PUMYEA	Oakland.
H. LATHAM	Oakland.
SAMUEL GAMBLE	Contra Costa.
GEO. BEMENT	Contra Costa.

REPORT.

DECEMBER 31, 1888.

To the honorable the State Board of Agriculture:

GENTLEMEN: The Directors of the First District Agricultural Association submit this, their report of the transactions of said association, for the year ending this date.

JOS. I. DIMOND, Secretary.

RECEIPTS AND EXPENDITURES.

Receipts.

From trotters and pacers.....	\$4,425 00	
From runners.....	1,475 00	
From gate.....	5,452 90	
From miscellaneous account.....	6,812 50	
From season tickets.....	280 00	
From sweepstakes.....	78 00	
		\$18,523 40

Expenditures.

For labor.....	\$779 00	
For trotters and pacers.....	7,775 00	
For runners.....	5,575 00	
For premiums.....	1,380 75	
For miscellaneous account.....	2,448 40	
For advertising.....	1,284 52	
		\$19,242 67

EXHIBITS AT THE FAIR—1888.

FIRST DEPARTMENT.

Name of Animal.	Owner.	Address.
CLASS I—THOROUGHBREDED STALLIONS.		
Imp. Mariner, three years old or over.....	H. I. Thornton.....	Contra Costa.
Three Cheers, three years old or over.....	Thomas G. Jones.....	Santa Rosa.
Sid, three years old or over.....	B. C. Holly.....	Vallejo.
Joe Hoge, two years old.....	H. I. Thornton.....	Contra Costa.
MARES.		
Narcola, three years old or over.....	H. I. Thornton.....	Contra Costa.
Nancy, three years old or over.....	B. C. Holly.....	Vallejo.
CLASS II—FAMILIES.		
Christmas, stallion, with five colts.....	P. A. Finigan.....	San Francisco.
Nere, dam, with three colts.....	P. A. Finigan.....	San Francisco.
Lady Nutwood, with two colts.....	E. Topham.....	Milpitas.
Brownie H, with five colts.....	L. Hewlett.....	Oakland.
CLASS III—HORSES OF ALL WORK—STALLIONS.		
Allen Wilkes, three years old or over.....	Thomas Bonner.....	Oakland.
Plowboy, three years old or over.....	H. I. Thornton.....	Contra Costa.
Storm, two years old.....	B. E. Harris.....	San Francisco.
Santa Rita Boy, one year old.....	L. Hewlett.....	Oakland.
MARES.		
Brownie H, three years old or over.....	L. Hewlett.....	Oakland.
Edna, three years old or over.....	B. E. Harris.....	San Francisco.
CLASS IV—STALLIONS—STANDARD.		
Don Marvin, four years old or over.....	F. P. Lowell.....	Sacramento.
Guy Davis, four years old or over.....	D. M. Ayers.....	Oakland.
Delwood, four years old or over.....	William Meese.....	Danville.
Blue Bull, four years old or over.....	Sackrider & Chisholm.....	Oakland.
Woodnut, four years old or over.....	B. C. Holly.....	Vallejo.
Charles Derby, three years old.....	Seth Cook.....	Danville.
Standard N, two years old.....	Thomas Bonner.....	Oakland.
Nut Grove, two years old.....	E. Topham.....	Milpitas.
Dietz Wilkes, one year old.....	A. C. Dietz.....	Oakland.
Antelope, one year old.....	L. Hewlett.....	Oakland.
Greenwood, suckling colt.....	L. Hewlett.....	Oakland.
MARES OR GELDINGS.		
Ann Trix, four years old or over.....	Thomas Bonner.....	Oakland.
Clite, four years old or over.....	James Taylor.....	Oakland.
Harry Mc, four years old or over.....	B. E. Harris.....	San Francisco.
Lady Nutwood, four years old or over.....	E. Topham.....	Milpitas.
Alda H, two years old.....	L. Hewlett.....	Oakland.
Sylvia, one year old.....	E. Topham.....	Milpitas.
Lorina, one year old.....	B. E. Harris.....	San Francisco.
SPAN OF ROADSTERS.		
Setting Sun and Vengeance.....	Thomas Bonner.....	Oakland.
Fearless and Adventure.....	B. E. Harris.....	San Francisco.
CLASS V—CLEVELAND BAYS—STALLIONS.		
Baron Hilton, three years old or over.....	Seth Cook.....	Danville.
Royal Studley, three years old or over.....	Seth Cook.....	Danville.
Saxon Prince, three years old or over.....	Seth Cook.....	Danville.
Barrington, three years old or over.....	Seth Cook.....	Danville.
Duke of York, three years old or over.....	Stericker Bros.....	Springfield, Ill.
Bonanza, three years old or over.....	Stericker Bros.....	Springfield, Ill.
General, three years old or over.....	Stericker Bros.....	Springfield, Ill.

FIRST DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
CLASS VI—DRAFT STALLIONS.		
Le Dard, three years old or over	Sacrider & Chisholm	Oakland.
Rigelo, three years old or over	Sacrider & Chisholm	Oakland.
Distinga, three years old or over	Sacrider & Chisholm	Oakland.
Young French Spy, three years old or over	Jackson Le Bon	San Leandro.
CLASS VII—SADDLE HORSES—EITHER SEX.		
Rondo	P. A. Finigan	San Francisco.
Bruce	B. E. Harris	San Francisco.
Scott	B. E. Harris	San Francisco.
SWEEPSTAKES—STALLIONS.		
Mariner	H. I. Thornton	Contra Costa.
Plowboy	H. I. Thornton	Contra Costa.
Young Prince	Charles Clark	San Pablo.
Baron Hilton	Seth Cook	Danville.
Royal Studley	Seth Cook	Danville.
Duke of York	Stericker Bros.	Springfield, Ill.
General	Stericker Bros.	Springfield, Ill.
MARES.		
Ann Trix	Thomas Bonner	Oakland.
Lady Nutwood	E. Topham	Milpitas.
Brownie H	L. Hewlitt	Oakland.
CLASS I—DURHAMS—BULLS.		
Mugwump, three years old or over	Wilfred Page	Penn's Grove.
3d Kirklevington, three years old or over	C. Younger & Son	Forest Home.
5th Kirklevington, three years old or over	C. Younger & Son	Forest Home.
Protector, two years old	Wilfred Page	Penn's Grove.
Rogue, two years old	Wilfred Page	Penn's Grove.
Princess, one year old	Wilfred Page	Penn's Grove.
Sonberry, one year old	Wilfred Page	Penn's Grove.
Cheesit, one year old	Wilfred Page	Penn's Grove.
Blood, one year old	Wilfred Page	Penn's Grove.
The Parson, one year old	Wilfred Page	Penn's Grove.
Belt, one year old	Wilfred Page	Penn's Grove.
Holdfast, one year old	Wilfred Page	Penn's Grove.
26th Kirklevington, one year old	C. Younger & Son	Forest Home.
To-morrow, under one year	Wilfred Page	Penn's Grove.
Pickrell, under one year	Wilfred Page	Penn's Grove.
Gilt Edge, under one year	Wilfred Page	Penn's Grove.
43d Kirklevington, under one year	C. Younger & Son	Forest Home.
COWS.		
Belle Medico, three years old or over	Wilfred Page	Penn's Grove.
Maita, three years old or over	Wilfred Page	Penn's Grove.
Henrietta Page, three years old or over	Wilfred Page	Penn's Grove.
Belle Strawberry, three years old or over	Wilfred Page	Penn's Grove.
21st Rose of F. H., three years old or over	C. Younger & Son	Forest Home.
Jessie Maynard 3d, three years old or over	C. Younger & Son	Forest Home.
4th Belle of F. H., three years old or over	C. Younger & Son	Forest Home.
Christmas Eve, two years old	Wilfred Page	Penn's Grove.
Enriquita, two years old	Wilfred Page	Penn's Grove.
Amelia 12th, two years old	C. Younger & Son	Forest Home.
Jessie Maynard 4th, two years old	C. Younger & Son	Forest Home.
HEIFER CALVES.		
Ashburner Lass, one year old	Wilfred Page	Penn's Grove.
Goldnut, one year old	Wilfred Page	Penn's Grove.
Belle of the Oaks, one year old	Wilfred Page	Penn's Grove.
Zuleika, one year old	Wilfred Page	Penn's Grove.
11th Oxford Rose, one year old	C. Younger & Son	Forest Home.
Nevada Belle 8th, one year old	C. Younger & Son	Forest Home.
Mannela, under one year	Wilfred Page	Penn's Grove.
Sweetmilk, under one year	Wilfred Page	Penn's Grove.
Red Dolly 27th, under one year	C. Younger & Son	Forest Home.
12th Oxford Rose, under one year	C. Younger & Son	Forest Home.
28th Rose of F. H., under one year	C. Younger & Son	Forest Home.

TRANSACTIONS OF THE
FIRST DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
CLASS IV—AYRSHIRES—BULLS.		
Lord Faxon, two years old.....	Geo. Bement & Son.....	San Pablo.
Hotspur, one year old.....	Geo. Bement & Son.....	San Pablo.
Express, under one year.....	Geo. Bement & Son.....	San Pablo.
COWS.		
Highland Mary, three years old or over.....	Geo. Bement & Son.....	San Pablo.
Sybilla, three years old or over.....	Geo. Bement & Son.....	San Pablo.
Marian, three years old or over.....	Geo. Bement & Son.....	San Pablo.
Ethelberta, two years old.....	Geo. Bement & Son.....	San Pablo.
Faxonia, one year old.....	Geo. Bement & Son.....	San Pablo.
Highland Beauty, under one year.....	Geo. Bement & Son.....	San Pablo.
CLASS VI—JERSEYS, OR ALDERNEYS AND GUERNSEYS—BULLS.		
Maud's Olaf, three years old or over.....	Thos. Ward.....	Oakland.
Billy Ralston, three years old or over.....	Thos. Ward.....	Oakland.
Silver King, one year old.....	Thos. Ward.....	Oakland.
COWS.		
Mignon, three years old or over.....	Thos. Ward.....	Oakland.
Phyllis, three years old or over.....	Thos. Ward.....	Oakland.
Lady Maud, three years old or over.....	Thos. Ward.....	Oakland.
Bonita, three years old or over.....	Thos. Ward.....	Oakland.
Dolly of Marin, three years old or over.....	John Brannan.....	Piedmont.
Lady Wickham 2d, two years old.....	Thos. Ward.....	Oakland.
Anita, two years old.....	Thos. Ward.....	Oakland.
Oak Queen, two years old.....	Thos. Ward.....	Oakland.
Olafina, two years old.....	Thos. Ward.....	Oakland.
Lucy, two years old.....	Thos. Ward.....	Oakland.
Violet, under one year.....	Thos. Ward.....	Oakland.
CLASS VII—HOLSTEINS—BULLS.		
Sedro, three years old or over.....	Frank H. Burke.....	Menlo Park.
Billee Taylor, three years old or over.....	Frank H. Burke.....	Menlo Park.
Oro Blanco, three years old or over.....	J. H. White.....	Lakeville.
Von Moltke, two years old.....	Frank H. Burke.....	Menlo Park.
El Cuervo, two years old.....	Frank H. Burke.....	Menlo Park.
Cortez, two years old.....	Frank H. Burke.....	Menlo Park.
Juneau, two years old.....	J. H. White.....	Lakeville.
Huachuca, two years old.....	J. H. White.....	Lakeville.
Sedro's Thistle, one year old.....	Frank H. Burke.....	Menlo Park.
King of Menlo, one year old.....	Frank H. Burke.....	Menlo Park.
Halbert, one year old.....	J. H. White.....	Lakeville.
Laredo, one year old.....	J. H. White.....	Lakeville.
California, under one year.....	Frank H. Burke.....	Menlo Park.
Lincoln's Pride, under one year.....	Frank H. Burke.....	Menlo Park.
Lorenzo, under one year.....	J. H. White.....	Lakeville.
COWS.		
Sylpha, three years old or over.....	Frank H. Burke.....	Menlo Park.
Korvertje, three years old or over.....	Frank H. Burke.....	Menlo Park.
Thissa, three years old or over.....	Frank H. Burke.....	Menlo Park.
Winfridala, three years old or over.....	J. H. White.....	Lakeville.
Annie, three years old or over.....	J. H. White.....	Lakeville.
Annot Lyle, three years old or over.....	J. H. White.....	Lakeville.
Wayward, three years old or over.....	J. H. White.....	Lakeville.
Dagodine, three years old or over.....	J. H. White.....	Lakeville.
Ontarette, two years old.....	Frank H. Burke.....	Menlo Park.
Crysanthemum, two years old.....	Frank H. Burke.....	Menlo Park.
Lasquite, two years old.....	J. H. White.....	Lakeville.
Etchetah, two years old.....	J. H. White.....	Lakeville.
Minnie Wayward, one year old.....	J. H. White.....	Lakeville.
Caliente, one year old.....	J. H. White.....	Lakeville.
Bangalis, one year old.....	Frank H. Burke.....	Menlo Park.
Linconia, under one year.....	Frank H. Burke.....	Menlo Park.
Chapala, under one year.....	J. H. White.....	Lakeville.
Eudora, under one year.....	J. H. White.....	Lakeville.
Montecito, under one year.....	J. H. White.....	Lakeville.

FIRST DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
HERDS—DURHAMS, HEREFORDS, GALLOWAYS, AND POLLED ANGUS.		
Mugwump, bull, over two years old; cows: Henrietta Page, Maita, Strawberry Belle, Belle Medico.....	Wilfred Page.....	Penn's Grove.
3d Kirklevington, bull, over two years old; cows: Jessie Maynard 3d, Jesse Maynard 4th, 4th Belle of F. H., Amelia 12th.	C. Younger & Son.....	Forest Home.
Holdfast, bull, under two years old; cows: Belle of the Oaks, Ashburner's Lass, Goldnut, Sweetmilk.....	Wilfred Page.....	Penn's Grove.
26th Kirklevington, bull, under two years old; cows: 11th Oxford Rose, 12th Oxford Rose, Nevada Bell 8th, 27th Red Dolly.....	C. Younger & Son.....	Forest Home.
AYRSHIRES, JERSEYS OR ALDERNEYS, AND DEVONS.		
Maud's Olaf, bull, over two years old; cows: Lady Maud, Phyllis, Mignon, Bonita.....	Thomas Ward.....	Oakland.
Lord Faxon, bull, over two years old; cows: Highland Mary, Ethelberta, Marian, Sybilla.....	Geo. Bement & Son.....	San Pablo.
Silver King, bull, under two years old; cows: Oak Queen, Olafina, Anita, Lady Wickham 2d.....	Thomas Ward.....	Oakland.
HOLSTEINS.		
Sedro, bull, any age; cows: Thissa, Sylpha, Kowertje, Ontarette.....	Frank H. Burke.....	Menlo Park.
Oro Blanco, bull, any age; cows: Annimie, Wonfredala, Wayward, Lasquite.....	J. H. White.....	Lakeville.
CLASS VIII—GRADED CATTLE—COWS.		
Bo-Peep, three years old or over.....	Mrs. Thomas Bonner.....	Oakland.
Dolly of Marin, three years old or over.....	John Brannan.....	Piedmont.
CLASS X—SWEEPSTAKES, DURHAMS, HEREFORDS, GALLOWAYS, AND POLLED ANGUS—BULLS.		
Mugwump.....	Wilfred Page.....	Penn's Grove.
3d Kirklevington.....	C. Younger & Son.....	Forest Home.
5th Kirklevington.....	C. Younger & Son.....	Forest Home.
COWS.		
Maifa.....	Wilfred Page.....	Penn's Grove.
11th Oxford Rose.....	C. Younger & Son.....	Forest Home.
AYRSHIRES, JERSEYS, OR ALDERNEYS, HOLSTEINS, AND DEVONS—BULLS.		
Sedro.....	Frank H. Burke.....	Menlo Park.
Oro Blanco.....	J. H. White.....	Lakeville.
COWS.		
Sylpha.....	Frank H. Burke.....	Menlo Park.
Annimie.....	J. H. White.....	Lakeville.
CLASS XI—SHEEP.		
Just Right, Cotswold ram.....	C. Younger & Son.....	Forest Home.
SWEEPSTAKES.		
Just Right, ram, any age or breed.....	C. Younger & Son.....	Forest Home.
Pen of five Cotswold ewes.....	C. Younger & Son.....	Forest Home.

TRANSACTIONS OF THE
FIRST DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
CLASS XII—POULTRY.		
Three Black-breasted Game Bantams	Thomas Ward	Oakland.
Two Plymouth Rocks	Thomas Ward	Oakland.
Two Brown Leghorns	Thomas Ward	Oakland.
Three Light Brahmas	Thomas Ward	Oakland.
Two Poland geese	Thomas Ward	Oakland.
Two Toulouse geese	Frank Burke	Menlo Park.
Two Pekin ducks	Frank Burke	Menlo Park.
Two Rouen ducks	Frank Burke	Menlo Park.

PREMIUMS AWARDED—1888.

FIRST DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I—THOROUGH-BRED HORSES— STALLIONS.			
Three Cheers, three years old or over.....	Thos. G. Jones	Sonoma County.....	1st prem.
Mariner, three years old or over.....	H. I. Thornton.....	Contra Costa Co.....	2d prem.
Joe Hoge, two years old.....	H. I. Thornton.....	Contra Costa Co.....	1st prem.
MARES.			
Narcola, three years old or over	H. I. Thornton.....	Contra Costa Co.....	1st prem.
Nancy, three years old or over	B. C. Holly.....	Vallejo.....	2d prem.
CLASS II—FAMILIES.			
Christmas, with five colts	P. A. Finigan	San Francisco.....	1st prem.
Lady Nutwood, with two colts	E. Topham.....	Santa Clara Co.....	1st prem.
CLASS III—HORSES OF ALL WORK— STALLIONS.			
Allen Wilkes, three years old or over.....	Thos. Bonner, Ag't.....	Alameda Co.....	1st prem.
Plowboy, three years old or over	H. I. Thornton.....	Contra Costa Co.....	2d prem.
Storm, two years old	Ben. E. Harris	San Francisco.....	1st prem.
Santa Rita Boy, one year old.....	L. Hewlett	Oakland	1st prem.
MARES.			
Edna, three years old or over	Ben. E. Harris	San Francisco.....	1st prem.
Brownie H, three years old or over.....	L. Hewlett	Alameda Co.....	2d prem.
CLASS IV—STANDARD—STALLIONS.			
Woodnut, four years old or over	B. C. Holly.....	Vallejo.....	1st prem.
Don Marvin, four years old or over.....	F. P. Lowell.....	Sacramento	2d prem.
Charles Derby, three years old	Seth Cook.....	Contra Costa Co.....	1st prem.
Nut Grove, two years old.....	E. Topham.....	Santa Clara Co.....	1st prem.
Standard N, two years old.....	Thos. Bonner, Ag't.....	Alameda Co.....	2d prem.
MARES OR GELDINGS.			
Lady Nutwood, four years old or over...	E. Topham.....	Santa Clara Co.....	1st prem.
Clite, four years old or over	James Taylor	Oakland	2d prem.
Alda H, two years old	L. Hewlett	Oakland	1st prem.
Sylvia, one year old	E. Topham.....	Santa Clara Co.....	1st prem.
MATCHED ROADSTERS.			
Setting Sun and Vengeance	Thos. Bonner, Ag't.....	Alameda Co.....	1st prem.
Fearless and Adventure.....	Ben. E. Harris	San Francisco.....	2d prem.
CLASS V—CLEVELAND BAYS—STALLIONS.			
Baron Hilton, three years old or over ..	Seth Cook.....	Contra Costa Co.....	1st prem.
Saxon Prince, three years old or over ..	Seth Cook.....	Contra Costa Co.....	2d prem.
CLASS VI—DRAFT STALLIONS.			
Rigelo	Sackrider & Chis- holm.....	Alameda Co.....	1st prem.
Distinga	Sackrider & Chis- holm.....	Alameda Co.....	2d prem.
CLASS VII—SADDLE HORSES.			
Bruce	Ben. E. Harris	San Francisco.....	1st prem.
Scott	Ben. E. Harris	San Francisco.....	2d prem.
SWEEPSTAKES—STALLIONS.			
Royal Studley	Seth Cook.....	Contra Costa Co.....	1st prem.
Baron Hilton	Seth Cook.....	Contra Costa Co.....	2d prem.

FIRST DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
MARES.			
Brownie H.	L. Hewlett	Alameda Co.	1st prem.
Lady Nutwood	E. Topham	Santa Clara Co.	2d prem.
CLASS I—DURHAMS—BULLS.			
3d Kirklevington of Forest Home, three years old or over	C. Younger & Son	Forest Home	1st prem.
5th Kirklevington of Forest Home, three years old or over	C. Younger & Son	Forest Home	2d prem.
Protector, two years old	Wilfred Page	Penn's Grove	1st prem.
Rogue, two years old	Wilfred Page	Penn's Grove	2d prem.
26th Kirklevington of Forest Home, one year old	C. Younger & Son	Forest Home	1st prem.
Blood, one year old	Wilfred Page	Penn's Grove	2d prem.
COWS.			
Jessie Maynard, three years old or over	C. Younger & Son	Forest Home	1st prem.
Belle Medico, three years old or over	Wilfred Page	Penn's Grove	2d prem.
Amelia 12th, two years old	C. Younger & Son	Forest Home	1st prem.
Christmas Eve, two years old	Wilfred Page	Penn's Grove	2d prem.
CALVES.			
Pickrell, under one year	Wilfred Page	Penn's Grove	1st prem.
Belle of the Oaks, one year old	Wilfred Page	Penn's Grove	1st prem.
Goldnut, one year old	Wilfred Page	Penn's Grove	2d prem.
28th Rose of Forest Home, under one year	C. Younger & Son	Forest Home	1st prem.
CLASS IV—AYRSHIRES—BULLS.			
Lord Faxon, two years old	Geo. Bement & Son	San Pablo	1st prem.
Hotspur, one year old	Geo. Bement & Son	San Pablo	1st prem.
COWS.			
Faxonia, one year old	Geo. Bement & Son	San Pablo	1st prem.
CALVES.			
Express, under one year	Geo. Bement & Son	San Pablo	1st prem.
Highland Beauty, under one year	Geo. Bement & Son	San Pablo	1st prem.
CLASS VI—JERSEYS—BULLS.			
Billy Ralston, three years old or over	Thos. Ward	Oakland	1st prem.
Maud's Olaf, three years old or over	Thos. Ward	Oakland	2d prem.
Silver King, one year old	Thos. Ward	Oakland	1st prem.
COWS.			
Mignon, three years old or over	Thos. Ward	Oakland	1st prem.
Lady Maud, three years old or over	Thos. Ward	Oakland	2d prem.
Oak Queen, two years old	Thos. Ward	Oakland	1st prem.
Lady Wickham, two years old	Thos. Ward	Oakland	2d prem.
Anita, one year old	Thos. Ward	Oakland	1st prem.
Violet, one year old	Thos. Ward	Oakland	2d prem.
CLASS VII—HOLSTEINS—BULLS.			
Oro Blanco, three years old or over	J. H. White	Lakeville	1st prem.
Sedro, three years old or over	Frank H. Burke	Menlo Park	2d prem.
El Cuervo, two years old	Frank H. Burke	Menlo Park	1st prem.
Huachuca, two years old	J. H. White	Lakeville	2d prem.
King of Menlo, one year old	Frank H. Burke	Menlo Park	1st prem.
Laredo, one year old	J. H. White	Lakeville	2d prem.
COWS.			
Minfridala, three years old or over	J. H. White	Lakeville	1st prem.
Sylpha, three years old or over	Frank H. Burke	Menlo Park	2d prem.
Lasquite, two years old	J. H. White	Lakeville	1st prem.
Etchelah, two years old	J. H. White	Lakeville	2d prem.
Minnie Hayward	J. H. White	Lakeville	1st prem.
Chapala	J. H. White	Lakeville	2d prem.

FIRST DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
CALVES.			
Lorenzo, under one year	J. H. White	Lakeville	1st prem.
CLASS VIII—GRADED CATTLE—COWS.			
Bo-Peep	Mrs. Thos. Bonner	Oakland	1st prem.
CLASS I—SWEEPSTAKES—BULLS.			
3d Kirklevington of Forest Home	C. Younger & Son	Forest Home	1st prem.
Mugwump	Wilfred Page	Penn's Grove	2d prem.
COWS.			
11th Oxford Rose	C. Younger & Son	Forest Home	1st prem.
Maita	Wilfred Page	Penn's Grove	2d prem.
CLASS II—SWEEPSTAKES—BULLS.			
Sedro	Frank H. Burke	Menlo Park	1st prem.
Oro Blanco	J. H. White	Lakeville	2d prem.
COWS.			
Annimie	J. H. White	Lakeville	1st prem.
Sylpha	Frank H. Burke	Menlo Park	2d prem.
HERDS—DURHAMS.			
Mugwump, bull, over two years old; cows: Maita, Henrietta Page, Strawberry Belle, Belle Medico	Wilfred Page	Penn's Grove	1st prem.
Holdfast, bull, under two years old; cows: Belle of the Oaks, Goldnut, Ashburner Lass, Sweet Milk	Wilfred Page	Penn's Grove	1st prem.
HERDS—AYRSHIRES, JERSEYS, ALDERNEYS, AND DEVONS.			
Lord Faxon, bull, over two years old; cows: Highland Mary, Ethelberta, Marian, Sybilla	Geo. Bement & Son	San Pablo	1st prem.
Silver King, bull, under two years old; cows: Oak Queen, Olafina, Violet, Lady Wickham 2d	Thomas Ward	Oakland	1st prem.
Oro Blanco, bull; cows: Annimie, Winfridala, Wayward, Lasquite	J. H. White	Lakeville	1st prem.
CLASS X—SHEEP.			
Just Right, Cotswold ram	C. Younger & Son	Forest Home	1st prem.
Pen of five Cotswold ewes	C. Younger & Son	Forest Home	1st prem.
SWEEPSTAKES.			
Just Right, ram, any age or breed	C. Younger & Son	Forest Home	1st prem.
CLASS XII—POULTRY.			
Pair Black-breasted Game Bantams	Thomas Ward	Oakland	1st prem.
Pair Plymouth Rocks	Thomas Ward	Oakland	1st prem.
Pair Brown Leghorns	Thomas Ward	Oakland	1st prem.
Pair Light Brahmas	Thomas Ward	Oakland	1st prem.
Pair Langshans	Thomas Ward	Oakland	1st prem.
Pair Poland geese	Thomas Ward	Oakland	1st prem.
Pair Toulouse geese	Thomas Ward	Oakland	1st prem.
Pair Pekin ducks	Thomas Ward	Oakland	1st prem.
Pair Rouen ducks	Thomas Ward	Oakland	1st prem.
Largest collection of poultry exhibited by one person or firm	Thomas Ward	Oakland	1st prem.

SPEED PROGRAMME.

MONDAY, AUGUST 27, 1888.

RACE No. 1—TROTTING.

For stallions. Purse, one thousand five hundred dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Woodnut, ch. s., by Nutwood; dam, Addie.....	B. C. Holly	 Vallejo.
Guy Wilkes, b. s., by Geo. Wilkes; dam, Lady Bunker	San Mateo Stock Farm.....	 San Mateo.
Stamboul, b. s., by Sultan; dam, Fleetwing.....	L. J. Rose	 Los Angeles.

SUMMARY.

Guy Wilkes	1	2	2	1	1
Stamboul	3	1	1	2	2
Woodnut	2	3	3	3	3

Time—2:18; 2:17; 2:19½; 2:24; 2:25.

RACE No. 2—PACING.

2:27 Class. Purse, seven hundred dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Little Hope, ch. g., by Tempest, Jr.; dam, Wil- son's Bluebell	W. B. Bradbury	 San Francisco.
Goldleaf, ch. f., by Sidney; dam, Fernleaf.....	M. Salisbury	 Pleasanton.
Ned Winslow, b. g., by Tom Benton; dam, by Dave Whipple, Jr.	J. L. McCord	 Sacramento.
San Diego, b. g., by Victor; dam, thoroughbred.....	H. C. Airhart & Co.	 San Diego.
Tom Linderman, b. g., by M. Kimball.....	Frank H. Dyer	 Salt Lake City.

SUMMARY.

Goldleaf	1	2	5	1	2	3	1
Little Hope	6	6	2	2	1	1	3
San Diego	4	5	1	3	3	2	2
Ned Winslow	2	3	4	5	5		

Time—2:19¼; 2:19; 2:23¼; 2:21½; 2:23¼; 2:26; 2:20.

TUESDAY, AUGUST 28, 1888.

RACE No. 3—RUNNING.

Introductory Stake. For two-year olds. Twenty-five dollars entrance; ten dollars forfeit; four hundred dollars added; one hundred to second; third to save stake. Winner of any two-year old race, after August first, to carry three pounds; of two or more, five pounds extra. Three quarters of a mile.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Bessie Shannon, b. f., by Shannon; dam, Betty Bishop.....	John Reavy & Co.	San Francisco.
Don José, ch. c., by Joe Hooker; dam, Countess Zeika.....	Theodore Winters.....	Sacramento.
Jackpot, b. g., by Joe Hooker; dam, Sugena.....	Thomas G. Jones.....	Santa Rosa.
Lady Helen, c. f., by Norfolk; dam, Jessie R.....	Thomas H. Williams.....	San Francisco.
Naicho B, s. g., by Wanderer; dam, Flower Girl.....	P. C. Donalich.....	Los Angeles.

SUMMARY.

Don José.....	1
Lady Helen.....	2
Jackpot.....	3

Time—1:16 $\frac{1}{4}$.

RACE No. 4—RUNNING.

Pardee Stake. For three-year olds. Fifty dollars entrance; half forfeit; four hundred dollars added; one hundred dollars to second; fifty dollars to third. Horses who have not won in 1888 a purse amounting to three hundred dollars or over, allowed five pounds; maidens allowed ten pounds. One mile.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Sid, br. s., by imp. Sidarthur; dam, Vestella.....	B. F. Denio.....	Vallejo.
Leon, b. c., by Leinster; dam, Ada A.....	F. P. Lowell.....	Sacramento.
Heliotrope, b. m., by Joe Hooker; dam, Yolone.....	Mrs. S. B. Wolfskill.....	Sacramento.
Welcome, br. m., by Warwick; dam, Aeola.....	Dan Hennessey.....	Sacramento.

SUMMARY.

Welcome.....	1
Leon.....	2
Heliotrope.....	3
Sid.....	0

Time—1:43 $\frac{1}{2}$.

RACE No. 5—RUNNING.

Contra Costa Stake. All ages. Three hundred dollars added; fifty dollars to second. Half mile heats.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Sleepy Dick, s. g.....	F. M. Starkey.....	Stockton.
Johnny Gray, g. g., by Shiloh; dam, Margrave.....	Owen Bros.....	Fresno City.
Kildare, s. g., by Kyrle Daly; dam, Mistake.....	Thos. G. Jones.....	Santa Rosa.
Lida Ferguson, ch. m.....	Hiram Willits.....	Ione.

SUMMARY.

Lida Ferguson	1	1
Sleepy Dick	2	2
Johnny Gray	3	3
Kildare	4	4

Time—0:48 $\frac{1}{4}$; 0:49.

RACE No. 6—RUNNING.

Free Purse. Three hundred dollars; fifty dollars to second. Maidens of three years old allowed ten pounds; of four years old and over, fifteen pounds. One mile.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Nancy, ch. f., by Jim Brown; dam, Nannie Hubbard	B. C. Holly	Vallejo.
Idalene Cotton, ch. f., by Jim Brown; dam, Lizzie P.	Maltese Villa Stables ..	San Joaquin Co.
Applause, b. g., by Three Cheers; dam, Alice N.	Thos. G. Jones	Santa Rosa.
Laura Gardner, ch. f., by Jim Brown; dam, Avail	W. L. Appleby	Santa Clara Co.

SUMMARY.

Laura Gardner	1
Idalene Cotton	2
Applause	3
Nancy	0

Time—1:43 $\frac{1}{4}$.

WEDNESDAY, AUGUST 29, 1888.

RACE No. 7—TROTTING.

Class, three-year olds. Purse, one thousand dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Memo, b. s., by Sidney; dam, Flirt	Jas. P. Kerr	San Francisco.
Grandee, b. g., by LeGrande; dam, Norma	San Mateo Stock Farm ..	San Mateo Co.
Direct, blk. g., by Director; dam, Echora	Pleasanton St'ck Farm ..	Pleasanton.

SUMMARY.

Grandee	1
---------------	---

Time—No time. Walkover.

SPECIAL RACE.

Purse, two hundred and fifty dollars. Mile heats, best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Stone, b. g.	Mose Hart	San Francisco.
Net, ch. m.	J. Nichols	San Francisco.
Chris, ch. g.	L. E. Clawsen	San Francisco.
Don Marvin, br. h.	Wilbur Smith	Sacramento.
Keogh, b. g. ¹	G. W. Woodward	San Francisco.

SUMMARY.

Net	2	2	1	4	4	2	1	1
Keogh	4	3	3	2	1	1	2	2
Don Marvin	3	1	2	1	2	4	3	3
Chris	1	4	4	3	3	3	dis.	

Time—2:36; 2:36½; 2:36; 2:35½; 2:34½; 2:36½; 2:34; 2:35.

RACE NO. 8—TROTTING.

2:40 Class. Purse, one thousand dollars. Two hundred dollars added, after giving Maggie E first money; making a purse of seven hundred dollars in four moneys. Mile heats, three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Maggie E, br. m., by Nutwood; dam, Patchen, Jr.	S. B. Emerson	Mountain View.
Economy, b. f., by Echo; dam, Lady Berky	B. C. Holly	Vallejo.
Ben Ali, b. g., by Geo. M. Patchen; dam, thoroughbred	John A. Goldsmith	S. Mateo County.
Sonnet, b. f., by Bentonian; dam, Sontag Dixie	Palo Alto Stock Farm	Menlo Park.
Dubec, b. g., by Sultan; dam, Lady Day	L. J. Rose	Los Angeles.

SUMMARY.

Ben Ali	3	1	3	1	1
Sonnet	1	2	1	3	4
Dubec	5	3	2	2	2
Economy	4	4	4	4	3

Time—2:26½; 2:26½; 2:26½; 2:26½; 2:28.

THURSDAY, AUGUST 30, 1888.

RACE NO. 9—RUNNING.

Alameda Stake. For all ages. Fifty dollars entrance; half forfeit, or only fifteen dollars if declared on or before August twentieth; with four hundred dollars added; one hundred dollars to second; third to save stake. Maidens, if three years old, allowed ten pounds; if four years old or over, fifteen pounds. Three quarters of a mile.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Daisy D, b. m., by Wheatly; dam, Black Maria ..	Bruce Cockrill	Salinas.
Nancy, ch. f., by Jim Brown; dam, Nannie Hubbard	B. C. Holly	Vallejo.
Edelweiss, b. m., by Joe Hooker; dam, Yolone ..	Mrs. S. B. Wolfskill	Santa Monica.
Applause, b. g., by Three Cheers; dam, Alice N. ..	Thos. G. Jones	Santa Rosa.
Notidle, ch. f., by Wildidle; dam, Bonanza	M. F. Tarpey	Oakland.

SUMMARY.

Applause	1
Notidle	2
Daisy D	3
Edelweiss	0

Time—1:15½.

RACE No. 10—RUNNING.

California Stake. For three-year olds. Fifty dollars entrance; half forfeit; four hundred dollars added; one hundred dollars to second; fifty dollars to third. One mile and a quarter.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Leon, b. c., by Leinster; dam, Ada A	F. P. Lowell	 Sacramento.
Canny Scot, ch. c., by Leinster; dam, Tibbie Dunbar	W. L. Pritchard	 Sacramento.

SUMMARY.

Leon	1
Canny Scot	2

Time—2:10.

RACE No. 11—RUNNING.

Golden Gate Stake. For two-year olds. Twenty-five dollars entrance; ten dollars forfeit; four hundred dollars added; one hundred dollars to second; third to save stake. Winner of any two-year old race, after August first, to carry five pounds; of two or more, seven pounds extra. Seven eighths of a mile.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Don José, ch. c., by Joe Hooker; dam, Countess Zeika	Theo. Winters	 Sacramento.
Jackpot, br. g., by Joe Hooker; dam, Sugena	Thos. G. Jones	 Santa Rosa.
Naicho B, s. g., by Wanderer; dam, Flower Girl	P. C. Donalich	 Los Angeles.
Lady Helen, b. f., by Norfolk; dam, Jessie R.	Thos. H. Williams	 San Francisco.

SUMMARY.

Don José	1
Lady Helen	2
Jackpot	3
Naicho B	0

Time—1:30.

RACE No. 12—RUNNING.

Free Purse. Three hundred dollars. For all ages. Fifty dollars to second. Horses who have run and not won at this meeting allowed five pounds. Horses that have not run second or better at this meeting allowed ten pounds. Three quarters of a mile heats.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Daisy D, b. m., by Wheatly; dam, Black Maria	Bruce Cockrell	 Vallejo.
Fusilade's Last, ch. f., by John W. Norton; dam, Fusilade	B. C. Holly	 Vallejo.
Elwood, ch. g., by Norfolk; dam, Ballinette	Maltese Villa Stables	 San Joaquin Co.
Susie S, b. m., by Ironwood; dam, Jennie	L. E. Sturgill	 Ione.
Oro, b. s., by Norfolk; dam, Golden Gate	Owen Bros.	 Fresno City.
Laura Gardner, ch. f., by Jim Brown; dam, Avail	William Appleby	 Santa Clara.

SUMMARY.

Daisy D.	1	2	1
Elwood	5	1	2
Laura Gardner.....	2	3	r. o.
Oro	7	5	r. o.

Time—1:15½; 1:15; 1:16½.

FRIDAY, AUGUST 31, 1888.

RACE No. 13—TROTTING.

2:28 Class. Purse, one thousand dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Rosie Mc, b. m., by Alex Button; dam, Rose-dale	G. W. Woodard	Yolo.
Fallis, b. s., by Electioneer; dam, Felicia.....	F. P. Lowell.....	Sacramento.
Bonanza, b. s., by Arthurton; dam, Sister.....	R. Havey	San Francisco.
Franklin, blk. g., by Gen. Reno; dam, unknown.	Charles Davis.....	San Francisco.

SUMMARY.

Rosie Mc.	3	2	1	1	1
Fallis	1	3	4	2	2
Franklin	2	1	2	4	3
Bonanza	4	4	3	3	4

Time—2:26½; 2:23½; 2:26¼; 2:31; 2:23¼.

RACE No. 14—PACING.

Special race. Purse, six hundred dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Racquit, blk. g., by Startle; dam, unknown	Charles I. Havens.....	San Francisco.
San Diego, b. g., by Victor; dam, thoroughbred ..	Martin Walsh.....	San Francisco.
Damiana, s. g., by Admiral; dam, unknown.....	L. E. Clawson	San Francisco.
Mink, b. g., pedigree unknown	H. J. Agnew	San Francisco.
Little Hope, b. g., by Tempest, Jr.; dam, Wil-son's Blue Bell.....	W. B. Bradbury.....	San Francisco.
Ontario, br. g., pedigree unknown.....	George Gordon.....	San Francisco.

SUMMARY.

San Diego.....	5	1	6	5	1	1
Mink	1	2	1	3	6	3
Little Hope.....	6	3	3	1	2	2
Damiana.....	3	5	2	2	3	r. o.

Time—2:26; 2:23; 2:25; 2:21¼; 2:23¼; 2:26¼.

SATURDAY, SEPTEMBER 1, 1888.

RACE No. 15—TROTTING.

2:22 Class. Purse, one thousand two hundred and fifty dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Gus Wilkes, br. g., by Mambrino Wilkes; dam, Fancy	James A. Dustin.....	Oakland.
Alcazar, b. s., by Sultan; dam, Minnehaha	L. J. Rose.....	Los Angeles.
Tempest, b. m., by Hawthorne; dam, by Chief-tain	L. U. Shippee.....	Stockton.
Thapsin, blk. g., by Berlin; dam, Lady Hubbard	Wilbur F. Smith.....	Sacramento.

SUMMARY.

Tempest	1	1	1
Gus Wilkes	2	2	3
Thapsin	4	3	2
Alcazar	3	4	4

Time—2:26½; 2:25½; 2:21½.

RACE No. 16—PACING.

Class, three-year old pacers. Purse, six hundred dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Adonis, b. g., by Sidney; dam, Venus.....	Antonio B. Gonzales.....	San Francisco.
Goldleaf, ch. f., by Sidney; dam, Fernleaf.....	Pleasanton Stock Farm.....	Pleasanton.
Cricket, b. m.....	James A. Dustin.....	Oakland.

SUMMARY.

Adonis.....	2	1	1	1
Goldleaf.....	1	2	3	2
Cricket.....	3	3	2	3

Time—2:18; 2:20¼; 2:23¼; 2:23.

MONDAY, SEPTEMBER 3, 1888.

RACE No. 17—RUNNING.

Selling Purse. Three hundred dollars, of which fifty dollars to second. Fixed valuation, two thousand dollars; one pound for each one hundred dollars down to one thousand, and two pounds for each one hundred dollars below one thousand. One pound added for each one hundred dollars above fixed value. One mile.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Spray, ch. m., by Joe Hooker; dam, Big Gun.	John Clark.....	Sacramento.
Oro, b. s., by Norfolk; dam, Golden Gate	Owen Bros.....	Fresno City.
Nerva, ch. m., by Bob Wooding; dam, Lizzie Marshall	Elmwood Stables.....	Milpitas.
Cito, s. g., by Joe Hooker; dam, Too Soon	Hiram Willits.....	Ione.

SUMMARY.

Nerva	1
Oro	2
Cito	3
Spray	0

Time—1:44.

RACE No. 18—RUNNING.

Free Purse. Three hundred dollars, of which fifty dollars to second. Weights, ten pounds below the scale. Mile heats.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Daisy D, b. m., by Wheatly; dam, Black Maria.	Bruce Cockrell	Salinas.
Fusilade's Last, ch. f., by John W. Norton; dam, Fusilade	B. C. Holly	Vallejo.
Welcome, br. m., by Warwick; dam, Aeolo ..	Dan Hennessey	Sacramento.

SUMMARY.

Daisy D	1	1
Fusilade's Last	3	2
Welcome	2	3

Time—1:45; 1:44.

RACE No. 19—RUNNING.

Consolation Purse. Four hundred dollars, of which one hundred dollars to second, and fifty dollars to third. Horses beaten once at this meeting to be allowed five pounds; beaten twice, ten pounds; beaten three times, fifteen pounds. Three quarters of a mile.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Sleepy Dick, ch. g., by Joe Daniels; dam, unknown	F. M. Starky	Stockton.
Idalene Cotton, ch. f., by Jim Brown; dam, Lizzie P	Maltese Villa Stable	San Joaquin Co.
Futurity, blk. f., by John A; dam, Ella Doane ..	W. L. Appleby	Santa Clara Co.
Susie S, b. m., by Ironwood; dam, Jennie	L. E. Sturgill	Ione.
Kildare, s. g., by Kyrle Daly; dam, Mistake	Owen Bros.	Fresno City.

SUMMARY.

Sleepy Dick	1
Susie S	2
Kildare	3
Idalene Cotton	0

Time—1:14.

SPECIAL RACE—RUNNING.

Five eighths of a mile dash. Purse, two hundred dollars.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Duke Spencer, b. c., by Duke of Norfolk; dam, Lou Spencer.....	Frank Depoister	 Sacramento.
Jackpot, br. g., by Joe Hooker; dam, Sugena.....	Thos. G. Jones	 Santa Rosa.
Joe Hoge, ch. c., by Joe Hooker; dam, Viola R.....	Harry I. Thornton.....	 San Francisco.

SUMMARY.

Duke Spencer	1
Jackpot	2
Joe Hoge	3

Time—1:03.

EXTRA DAY—TUESDAY, SEPTEMBER 4, 1888.

RACE No. 20—PACING.

Free for all pacing. Purse, eight hundred dollars. Mile heats, best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Mink, b. g.....	H. J. Agnew.....	 San Francisco.
Bracelet, b. g., by Nephew; dam, by Creighton.....	J. R. Hodson.....	 Sacramento.
Almont Patchen, br. s., by Juanita; dam, Glady	Wm. M. Billups	 Chico.
Goldleaf, ch. f., by Sidney; dam, Fernleaf.....	Pleasanton St'k Farm.....	 Pleasanton.

SUMMARY.

Almont Patchen	4	1	1	1
Goldleaf	1	2	2	3
Bracelet	3	3	3	2
Mink	2	dis.		

Time—2:23½; 2:17¾; 2:18; 2:21¼.

TRANSACTIONS

OF THE

SECOND DISTRICT AGRICULTURAL ASSOCIATION

For the Year 1888,

Composed of the Counties of San Joaquin, Tuolumne, Stanislaus, and Merced.

OFFICERS OF THE ASSOCIATION.

L. U. SHIPPEE.....	President.
J. M. LA RUE (P. O. Box 188).....	Secretary.
A. W. SIMPSON.....	Treasurer.

DIRECTORS FOR 1889.

FRED. ARNOLD	Stockton.
LOUIS GERLACH	Stockton.
B. F. LANGFORD	Lodi.
JOHN E. MOORE	Stockton.
CHARLES E. NEEDHAM.....	Belota.
R. C. SARGENT	Lodi.
JAMES A. SHEPHERD.....	Lathrop.
L. U. SHIPPEE	Stockton.

CORRESPONDING MEMBERS FOR 1888.

<i>Calaveras County</i> —	<i>Merced County</i> —
T. J. MATTESON	A. CHAMBERLAIN.....
H. A. MESSENGER	J. J. STEVENSON.....
<i>Tuolumne County</i> —	<i>Fresno County</i> —
HUGH QUINN	A. B. BUTLER
M. HARRIMAN	H. C. DAULTON
<i>Stanislaus County</i> —	<i>Tulare County</i> —
F. H. ROSS	E. GIDDINGS
A. BEITH	E. JACOBS
<i>Mariposa County</i> —	<i>Kern County</i> —
DANIEL WAGNER	SOL. JEWETT
J. W. SNYDER.....	GEORGE F. THORNTON.....

REPORT.

STOCKTON, November 26, 1888.

To the honorable the State Board of Agriculture:

GENTLEMEN: The Directors of the Second District Agricultural Association submit this, their report of the transactions of said association, for the year ending this date.

J. M. LA RUE, Secretary.

RECEIPTS AND EXPENDITURES.

Receipts.

Balance	\$1 80	
Bills payable	17,500 00	
State appropriation for 1887	2,500 00	
Rent of Pavilion	117 40	
Forfeits Sargent Stake of 1890	170 00	
Sale of privileges	4,732 35	
Life membership account	118 00	
Sale of exhibitors' tickets	480 00	
Park receipts	4,908 70	
Pavilion receipts	3,209 25	
Entrance fees and added money to races	7,020 00	
Donations (per list appended)	259 00	
National Trotting Association, back entrance	73 50	
Rent of Park and sale of hay	767 00	
Overdraft account Stockton Savings and Loan Society	797 61	
All other sources	161 00	
		<u>\$42,815 61</u>

Expenditures.

Expenses and indebtedness of 1887	\$629 48	
General expenses of 1888	7,422 49	
Balance of Pavilion contract	10,964 00	
Additional cost of Pavilion	1,407 03	
Paid on account of bills payable	2,500 00	
For permanent improvements at Park	1,585 37	
Insurance on Pavilion	825 00	
Purses of 1888	9,206 70	
Premiums, 1888	2,170 12	
Overdraft Stockton Savings and Loan Society	5,958 32	
Interest on overdraft	142 60	
		<u>\$42,811 11</u>
Cash		4 50
Total		<u>\$42,815 61</u>

DONATIONS, 1888.

James T. Mills	\$7 50	Miss Tower	\$2 00
L. U. Shippee	107 50	Mrs. W. D. Smith	1 00
Stockton Insane Asylum (Dr. W. H. Mays)	25 00	Miss Mollie Grattan	1 00
N. Nevin	10 00	Mrs. Dr. C. Grattan	8 50
Austin Bros.	15 00	P. A. Buell & Co.	5 00
Miss A. C. Clapp	18 50	S. C. H. and A. Works	26 00
P. Visser	12 00	Sargent Bros.	10 00
J. F. Visser	7 00		
Mrs. B. Keef	3 00		<u>\$259 00</u>

ANNUAL ADDRESS.

By GENERAL N. P. CHIPMAN, of Red Bluff, Tehama County, California. Delivered at the Pavilion Thursday evening, September 20, 1888.

THE EVOLUTION OF CALIFORNIA.

MR. PRESIDENT, LADIES, AND GENTLEMEN: In casting about for a subject upon which to address you, I have determined to use the hour you have kindly offered me in showing the evolution of California, with a word at the close in relation to the part your four counties—San Joaquin, Merced, Stanislaus, and Tuolumne—are performing in the marvelous development now taking place in this marvelous State.

California, the second largest State in the Union, contains one hundred and eighty-eight thousand nine hundred and eighty-one square miles; was acquired by the United States in 1848; the people met in convention to form a government at Monterey in September, 1849; the Constitution was adopted and a Legislature elected in November, 1849; the Legislature met and the Governor was inaugurated in December, 1849; and by Act of Congress, approved September 9, 1850, California as a State took its place—the thirty-first in the galaxy of the American Union.

This is the skeleton outline of California's birth. What pen shall write her proud history and prouder achievements? What prophetic vision shall unfold her grand future and grander achievements?

Nations are made up of units of very unequal value. Territory is sought by governments often, I may say usually, with little conception of their ultimate value or importance, but rather to aggrandize territory, or secure positions of importance in giving strength and self-protecting power.

The thirty-first unit in point of seniority, and when admitted probably the thirty-first in elements of Statehood, California has risen in rank and influence until she is one of the most conspicuous of the group of American States, and is more widely known throughout the globe than any State in the Union.

California was a trophy of war. Almost at the same moment that the United States and Mexico were signing the treaty of peace, the ratification of which by the several governments gave to us this rich heritage, gold was discovered under circumstances such as soon after created the wildest excitement and the most intense interest of any event that had occurred on the continent. There were then probably not to exceed fifteen thousand white population in the country, most of whom had, since 1843, come from the East and Oregon Territory. Some cereals had been grown, some fruits raised, and enough of agriculture pursued to show something of the capabilities of the soil and climate, but the people were mainly engaged in pastoral pursuits.

In the days of the greatest prosperity of the missions there were more cattle and horses in the valley regions of Southern California than are now in the entire State.

The policy of the ecclesiastical rulers had been to discourage the settlement of the country, deeming such course best calculated to advance their chief object—the conversion of the savages.

As early as 1831 wheat, barley, corn, beans, and peas were grown, the entire product being valued at \$86,284.

Of domestic cattle, horses, mules and asses, sheep, goats, and swine there were many thousands; besides many thousand wild horses and cattle.

In those days a saddle horse was worth \$10. (They had little use for any other.) A fat ox sold for \$5; a sheep for \$2. Two sheep were worth as much as a fat ox, and about the same as now.

As we look back upon the picture of serene loveliness that must have been presented in these great valleys, of waving grasses and wild grains and flocks of animals grazing undisturbed, one almost regrets that the avarice of man or the necessities of our race forced us to rudely disturb the Arcadian happiness of the people who inhabited these shores in those patriarchal days.

But gold was discovered, and, as if by magic, the scene changed almost as quickly as the shifting curtains of the sky in an approaching storm.

From Mexico, from Europe, from the Atlantic States, from South America, and from China there came pouring into the port of San Francisco, and down the western slope of the Sierras, in wagons and on foot, such a mixed and heterogeneous mass of energetic, daring, and reckless men as had never before invaded any part of the continent, except, possibly, in the conquest of Mexico.

In a very short time California contained a mixed population of nearly a quarter of a million souls. They came not to build up a State, but to gather riches and return to their homes. The climate did not bring them; the exuberance of the soil did not bring them; it was gold, gold, gold. All else faded before the highly wrought imaginations of these adventurous spirits. Where sixty bushels of wheat would grow to the acre, they paid \$40 per barrel for flour, and pork, and shipped it around Cape Horn; potatoes, almost indigenous to the soil, were worth a half a dollar a pound; a pair of coarse boots was worth \$40, and one who indulged the luxury of high heels and fancy tops paid \$100. An insignificant storeroom, constructed of rough boards, in San Francisco rented for \$3,000 per month; the old Parker House, which some of you remember, rented for \$120,000 per annum; lumber, that could be easily produced on the coast and in the mountains, rose to \$500 per thousand feet; the "El Dorado," a canvas tent of moderate size, used for a gambling saloon, brought \$40,000 per annum, and the United States Government paid \$7,000 per month for a Custom House. Wages were \$1 per hour, and skilled labor brought \$20 per day; as high as 15 per cent interest per month was paid with good security. People paid these enormous prices, wages, rents, and interest, and still accumulated immense fortunes.

In the diggings the miners found themselves without the means of effectively administering the law and were in fact a law unto themselves. In San Francisco the lawlessness of certain classes, and the prostitution of the powers of government to the uses of the lawless, forced into existence that historic and remarkable organization known as the Vigilance Committee, and even as late as 1855 it exercised its functions. It tried and executed criminals; it defied the writ of habeas corpus, and even placed under arrest a Judge of the Supreme Court who issued it.

When I look back upon that period and remember the motive that pervaded the people, and that they came not to build and stay but to gather up and carry away, it is to my mind one of the grandest episodes in our

nation's history, and evinces the highest proof of our capacity for self-government that out of these venturesome and restless spirits there came wisdom to frame a Constitution and enact a body of laws so sound in principle and progressive in spirit as to become substantially the foundation upon which the permanent prosperity of the State was to rest. These men gave us a Practice Act that has expanded, with a little departure in purpose and scope, into the Codes of to-day; they made a departure from the common law, under which most of them must have been reared, as to the domestic relations and rights of property, and gave us the wiser and better civil law which makes of the woman and the wife an owner by something more than dower or for life. Upon the Supreme Bench was placed lawyers of the time who enriched our literature by the wisdom and beauty of diction of their opinions and decisions.

A rugged justice pervaded the mining camps, and gold dust was safer then in an unguarded shanty than stovewood now in our back yards. In all the struggles of those early days lawlessness and crime had but temporary victories. The Vigilance Committee itself, while in a certain sense a lawless body, was in fact a protest against lawlessness and crime. The ruling forces of society were for law and order, and a code of honor, chivalric and manly, seemed to have set itself up in the hearts of the people. The men who have survived that wonderful period are many of them among us yet, and I always feel like lifting my hat in veneration when I meet one of them. The annals of American history in connection with the birth and the growth of no other State will record a like number of men comparable to those found in and out of the Society of California Pioneers. They came for gold and got it. From 1849 to 1857 there was deposited in the United States Mint \$385,255,454. The shipments by steamers amounted to \$376,191,632. In 1857 it was estimated that one hundred thousand miners had already returned to their homes, and many took back their gold without reporting. It was thought, and by high authority it was estimated, that \$600,000,000 had to that time been mined in the State.

Gold was found in nearly all the streams emptying into the great valley region, and gold seekers were necessarily made acquainted with the valley portions of the State.

The quick eye of the American was not slow to discover something here besides gold; the high prices of the necessities of life, and the rapid exhaustion of the richer placers that lay along the mountain streams, gradually unfolded the agricultural resources of the State, which have since been the marvel of the world. Indeed, so rapidly did the people enter into this new field, when once they began to think of making homes here, that in 1856 there were five hundred and seventy-eight thousand nine hundred and sixty-two acres in cultivation, and of wheat there was grown in that year nearly four million bushels; of barley, four million six hundred thousand bushels; of oats, one million two hundred and fifty thousand bushels, and a large quantity of butter and cheese was made, and a large number of fruit trees were planted.

The returns show that in 1856 there were of the domestic animals six hundred and eighty-four thousand cattle, one hundred and ten thousand horses, thirty thousand mules and asses, two hundred and fifty-three thousand sheep, and one hundred and eighty-six thousand swine.

The halo that had surrounded the brow of the gold seeker was vanishing. A new and more permanent industry was springing into life. California began to show elements of permanent strength and growth. Manufactories were being established, and people were gathering around

them their household gods and making homes. The tonnage arriving and departing from San Francisco was exceeded only by three American cities, New York, Boston, and New Orleans. We were already exporters of flour, oats, and barley, potatoes, tallow, wheat, lumber, and other products besides gold and silver.

Our public schools, beginning in 1851 with eleven thousand children, now had thirty-five thousand.

The period of gold mining had had its rise, and although, perhaps, not on the decline, it was fast losing its prestige as a controlling industry. Already it was seen that a State could not be built up out of an aggregation of mining camps; that agriculture and manufactures were at the foundation of permanent prosperity; that nature had strewn her gifts bountifully over the face of California, and those people were fortunate who were here to embrace them. The grandeur of her mountains; the phenomenal fertility of her soil; the glories of her varied climate; her noble rivers; her beautiful valleys and her charms for physical existence seized upon the judgment and imagination of those early people, and chained them spell-bound to the soil.

With this change came the second discovery of California. I do not think any one yet began to see, even in dreams, the ultimate greatness of the State. With that instinctive appreciation of a good thing when he sees it, the American settler had already pitched his tent here to stay, but with no very clear idea of the future of the State.

To the gold diggings and the quartz mining, now also beginning to be developed, and to pastoral pursuits, were added agriculture and manufactures.

From a product of less than forty thousand bushels of the cereals, as shown by the census of 1850, we had for the census of 1860 over twelve million bushels; and for 1870, another decade, over twenty-eight million bushels; and in 1884, the product reached nearly sixty-eight million bushels, of which the wheat product alone was over forty-three million bushels.

Traveling parallel with the wheat interest, was the wool interest. In 1854 we produced one hundred and seventy-five thousand pounds; in 1860 it had reached over three million pounds; in 1870, over twenty million pounds; in 1880, nearly forty-seven million pounds, and had been as high as fifty-six million pounds in 1876.

Wheat growing in the United States was unnaturally stimulated between 1875 and 1880 by a series of crop failures in Europe, which caused a demand never before or since so great.

The world's product went on without any diminution in the United States, and prices have fallen on the farm from a little over \$1 per bushel, to a trifle over 83 cents, showing a decline of over 20 per cent. The value of an acre of wheat has fallen over 22 per cent. The average value per acre since 1884 has been a little over \$8.

Keeping pace with agriculture, our manufactures have developed in like proportion.

In forty years we have stepped to the twelfth rank of the manufacturing States of the Union.

In agriculture we rank first, considering our wines and fruits.

In wool growing we rank about third, and we grow one sixth of the product of the United States.

In the production of gold we rank first.

I am not permitted to detain you in detailed evidences of the marvelous growth of the State. There are interests of large import not known even

to ourselves generally. Take for example petroleum oil. Less than ten years ago it was discovered. Now we produce not far from fifteen million gallons, and rank third among the States in this product.

I cannot stop to show you our vast wealth in timber, now rapidly disappearing from western forests, and nearly gone from the eastern regions, thus adding immensely to the value of our own forests.

With the decline in values of wheat and wool, and through the energetic and faithful efforts of our fruit growers, the Evolution of California brought us to confront a new and by far the most important condition of our development yet unfolded.

Gold was no longer king; wheat had ceased to hold its scepter over us; wool had become a slave instead of a master.

Here we were struggling against the world in wheat growing, with a disadvantage of transportation remorselessly immovable, and always against us; our lands were growing less productive; prices were falling; new areas of wheat land were opening elsewhere to cut us off from the world's markets; our population was but slowly increasing; lands were being aggregated, and monopolized in large holdings; our matchless climate was given no economic value; wheat land in California was valuable only as other wheat land of the globe, in ratio with its productive capacity, and lands not capable of growing cereals had a value only for grazing sheep and cattle, and in small tracts lost all value.

The light had begun to dawn upon Southern California. Water and climate and enterprising effort were doing their work. From 1880 to 1886 the increase in population in San Bernardino County was 128 per cent; in Los Angeles, 116; San Diego, 102; Fresno, 89; Santa Barbara, 73; Tulare, 66; San Luis Obispo, 63; Ventura, 60; or an average of 87 per cent in these eight counties.

In those six years the great wheat counties of San Joaquin and Colusa had gained but 9 per cent; Sacramento County, with a wealth of undeveloped resources, gained but 3 per cent; Butte County, famous for wheat and wool, had actually fallen off in population. In seventeen counties of the State, from 1880 to 1886, there was an absolute loss of population, and that loss, too, had fallen upon some of the best counties in the State. Even our bonanza year in wheat led to no change; a decadence followed in the very counties where the crop was largest. There were silent forces at work north as well as south of the Tehachapi. We of the north had not the advantage of competing lines of railroads to cheapen our transportation, and, more than all, to sound the praises of our great resources all over the East; we had not the unmistakable certificate of climate found in orange groves and olive orchards; but large plantings had been going on in all kinds of fruits, including the orange and the olive; our signal office stations were recording the truth of meteorological observations from Red Bluff south through all our valleys; that noble army of fruit growers were persistently making their way into eastern markets; the wine makers were astonishing the world with the excellence and abundance of their products. As if by magic there seemed to dawn upon the vision of the people of the United States that a new California had been discovered, and the golden period of 1849 seemed to be repeating itself.

What was all this necromancy? The trains of the Central Pacific had been bearing the people to and fro from the Atlantic and Pacific for fifteen years or more, but they had come and gone and seen nothing.

I will tell you the secret. The farmer of the northwest looked through his frosted window towards the setting sun; he read and was convinced that it was shining upon a land where the orange and the olive grow, and

where the lowest temperature in winter is sixty degrees above the cold that he and his domestic animals must endure; where all the products known to the most favored Western States were common to the soil; where a wide field of enterprise invited; where the fruits of every clime grew in exuberance and promised a rich reward to the intelligent grower. He read from the veracious reports of neighbors gone before of the products of this wonderland, that in a little more than a decade we have increased our exports east of raisins from a few experimental boxes to eight hundred thousand boxes; that we are making twenty million gallons of wine annually; that from insignificant shipments a few years ago we are sending out daily trains to all parts of the East of the most delicious green fruits in the world—reaching thousands of carloads; that California will soon supply the world with canned vegetables and fruits; that oranges are grown in every valley of the State and in the foothills to an elevation of two thousand feet; that thousands of acres await his coming, attainable at reasonable prices; that a fruit farm of twenty acres intelligently managed is a source of income with less exposure and with more enjoyable employment than an ordinary farm of ten times that area cultivated to wheat or cereals. He turns to our industrial statistics, and he finds amid all this stir and activity in fruit growing, our gold and silver output goes steadily on, and that mining fields are still inviting. He finds that wheat and wool and cattle and sheep and all the products of the farm are, as heretofore, forming a part of our industries; that manufactures are rapidly increasing, our towns and cities building up, and all the indicia of a prosperous people are everywhere visible. If there is an ideal home on earth it must be in California, he thinks, and he comes. He must come. Perhaps not this year or next, but nothing can keep the man who is able to do so from coming to this coast so soon as he can cut loose without too great sacrifice from his present home, and is not restrained by overpowering circumstances.

They will not all come. What I mean to say is, that of the forty-five million people in this country who to-day live in a climate where the thermometer ranges from five to fifty-five degrees below zero in the winter, there will be enough who want to escape the rigors of those frozen regions to build up here a great State.

The census of 1900 will show a population in California of five million souls; many far-seeing men place the figure higher.

Such a population will restore the prestige of the wheat grower; our extensive systems of irrigation then in operation will give large returns to thousands of acres for grasses; our fruit area will be enlarged, and the home consumption of wheat will demand all that is grown from the remaining lands. California will make her own price and not Liverpool. Five million people will consume nearly twenty-five million bushels per annum, which is more than we export now.

In tracing this wonderful development, this evolution of a great State, Mr. President, I was necessarily obliged to generalize largely and to avoid details, but the picture is not overdrawn, its lights and shades are cast by the living truth that shines upon it.

California was the dream of the adventurer; it has become the realization of the typical home of a free American. With all its wealth of industries and practical capabilities, it is and always will be surrounded by a halo of romance that will make it unique among the States of the Union.

Great in manufactures, in agriculture, in her forestry, in her wines, and in her fruits, she can never be commonplace. She is destined to become and will always remain the Empire State of the great West.

And now, Mr. President, to come nearer home, let me ask what District No. 2 has done, is doing, and must do to give her standing, power, and influence in this grand development?

As States are the units of nations, so in our system counties are the units of States. I wish to say a word as to the four units composing the Second Agricultural District of our golden State: The great valley of California, embracing one third of the agricultural lands of the State, is included between the foothills of the Sierra Nevada on the east, and the Coast Range on the west. Its length from the Tejon Mountains on the south, to Red Bluff on the north, where the valley properly terminates, is about four hundred miles, with a varying width from over sixty miles to less than forty miles. Its total area is about seventeen thousand six hundred square miles, or eleven million two hundred and sixty-four thousand acres. This great valley is broken into two divisions, and are known as the Sacramento Valley and the San Joaquin Valley.

Professor Hilgard, in his "Agricultural Features of California," terminates the Sacramento Valley on the south at the Calaveras River in San Joaquin County, and he gives it about six thousand two hundred square miles, or three million nine hundred and sixty-eight thousand acres. This would make the area of the San Joaquin Valley eleven thousand four hundred square miles, or seven million two hundred and ninety-six thousand acres, nearly double the area of the Sacramento Valley. I suppose the counties of your district embrace at least one third of this vast territory, or about two million five hundred thousand acres.

A comparison of your assessment roll for the last four years discloses some significant facts.

From 1884 to 1887 your four counties declined in assessed valuation from a total in 1884 of \$66,900,014 to \$63,410,349 in 1887, a loss of nearly \$3,500,000, and yet one year later, in 1888, your valuation leaped to \$71,765,979, a gain in valuation over 1887 of over \$8,250,000. This rapid increase in valuation is shown in nearly all the valley counties. The boom in Southern California has had the effect, I am sorry to say, to materially advance taxable valuations elsewhere, without bringing with it the immigration and the purchasers which the rise in values would seem to indicate must have followed. I will in a moment notice the drift of immigration in the State.

All these years the price of the leading product of your soil has been declining, until the margin of profit has almost disappeared. You are getting some of the new population, and you are feeling the impulse of the changes going on elsewhere in the State, through your assessment roll, as I have shown. In fact, you ought to have more than doubled your assessment roll as well as your population, for you have a vast area of irrigable lands as rich as can be found, and you have every known advantage anywhere existing in the State.

It seems to me that you are prostituting the highest gifts bestowed on any of our people, by keeping up this incessant agricultural monotone of wheat, wheat, wheat, when you have the most richly endowed portion of the entire State, and the source of the greatest wealth of any like area in the State.

I would not speak so plainly if your position were not assured, and if you had not within your grasp the highest possibilities. Don't allow yourself to be offended until you have heard me through. One good crop in three in San Joaquin, Stanislaus, or Merced means pretty nearly as much as three crops in some other portions of the State where wheat growing is impoverishing the soil and pauperizing the owner. When your crop fails, it is total, I understand, and you lose only seed and cost of seeding. In

other places I might name, the farmer nurses the hope of a crop clear to the tail of the thrasher, and when he hauls away three sacks to the acre, and sells for \$4 50, and notes a loss of about \$4 cash per acre expended, I fancy it makes a Merced wheat farmer satisfied even with his hard lot. I understand how cheaply you can farm, and how the genius and enterprise of your Stockton inventors and manufacturers have reduced the cost of harvesting to almost a song, comparatively, and that, as wheat growers, you are highly favored. I admit all this. What I am quarreling with you about now is that you are doing with your soil, in planting to wheat, what Governor Stanford would be doing with his blooded mares, if he were giving to the world \$150 mules instead of \$40,000 horses, such as that sold the other day at auction, in Kentucky.

If you will drop in upon that highly civilized community of Riverside, and look around, you will see what I mean. Here is land but a few years ago an arid desert, selling for \$1,000 per acre, and showing fair interest on that figure. Jump on the cars and visit your neighbor at Fresno. Behold, the magician's wand has swept over these hot sandy plains and desolate waste places, and the inspired people have with their own hands beaten back the raisin exports of Spain, and almost driven them out of the American market. Land not many years ago valueless is now worth almost all a man is minded to ask for it. The products of Fresno can pay passenger time for transportation to New York and Boston, and leave to the grower more profit per pound than you can get per pound for your wheat in Liverpool, and he is producing five times as many pounds to the acre.

I am leading up to this proposition that nowhere in any of the great valleys of California where land is suitable for irrigation, as yours is, and where water is attainable for that purpose, can the owner afford to pursue the old methods; nor can communities be built up to any high degree of prosperity without resorting to irrigation in regions situated as most of your great valley is.

From my standpoint I consider the three counties of San Joaquin, Stanislaus, and Merced in many respects the most highly favored of any like area in the State. Your central position is one of great strategical importance in your battle with transportation. All competing lines of railroad to our metropolis must pass by or near to you. You are within cheap and quick communication with the navigable waters of the State; you have an immense area of irrigable land, and you have water in abundance to put on it; your climate leaves nothing to be desired. To my mind, such conditions in California mean simply bullion, the dies, the molds, the furnace, and nothing wanting but a little fire to turn out the twenty-dollar pieces.

I know what the wheat farmer is saying to all this. I am perfectly conscious that he will not stop much longer to hear me talk such heterodoxy, but I beg him out of courtesy to a stranger, who has come a long distance for the privilege of talking a little modern nonsense, to hear me a moment longer.

Experience teaches, and statistics show, that the irrigated lands of the globe are the most profitable as they are the most productive. In our climate successive crops can be produced each year. Fewer acres will sustain a larger population. The lands become intrinsically more valuable, and retain their productive capacity longer. The water not only brings out the fruitfulness of the soil, but is itself a fructifier. Practically water increases the acreage. If he is a benefactor who makes two blades of grass grow where one grew before, how much more is he a benefactor who makes two acres of land out of one. Irrigation to the million acres of your noble valley means creating a million more acres.

You don't know anything about raising fruit, and you are too old to learn. Very well. You know how to raise grass and feed it to stock, and there is three times the profit in that over wheat growing. Do you know that the hay crop of the United States is more valuable than the wheat crop? It is so. This highly evolved and developed animal called man pays less for his flour than he does for forage for his domestic animals.

One acre of your rich irrigable land will produce more value in grasses than any ten in wheat, year in and out.

You don't want to raise grass or fruit. Very well. Sell half of your land to some one who does. Loan the money at 6 per cent interest and you will have more money at the end of the year than you have been having, unless you continue to raise wheat on the land reserved.

Mr. President, I have heard the groans and lamentations of your farmers for years resounding throughout this great valley, and as far north as my home. I have heard them pray for rain (and when a California rancher prays you may know he is in trouble); I have heard them praying for rain when we were having twenty inches, and you were burning up with six. Why is it in all these years you have not seen how much more greatly blessed you were than we. In your noble valley, washing the parched shores of the grandest domain on earth was all the water you needed flowing useless to the sea, charged with fertilizing properties, but above all carrying in its bosom the elements to make you all rich and furnish homes for a million souls.

You have treated your land like the gods treated Tantalus, who was placed in the midst of a lake whose waters receded as he tried to drink, and was left to die of thirst. Like him your parched earth cried out as the waters flowed past babbling and joyous, yet regretful, to the sea.

Let me halt a moment at this point and show you the movements of population to this State. Let us see if we cannot draw a lesson of value to us on this same subject of irrigation.

I have prepared a table showing the changes in population of certain representative counties of the State, including your four counties, and the County of Fresno, in the San Joaquin Valley; five representative counties in the Sacramento Valley, and three in the southern part of the State.

The Federal census of 1880 gave a population of four and three tenths to each school child in the State. We have had no general census since, but we have a school census each year, and assuming this ratio of four and three tenths to be the same now as in 1880, we easily find our population by consulting the county school census. I have done this, and I ask your careful consideration of the result:

COUNTY.	1880.	1886.	1888.	Gain in Six Years.	Gain in Eight Years.
Merced	5,656	6,622	6,757	966	1,101
San Joaquin	24,354	26,626	27,098	2,272	2,744
Stanislaus	8,751	10,501	10,320	1,750	1,569
Tuolumne	7,848	6,920	6,811	*928	*1,037
Fresno	9,478	17,987	25,202	8,758	15,724
San Bernardino	7,786	17,759	25,296	9,973	17,510
Los Angeles	33,379	71,415	117,175	38,066	73,796
San Diego	8,618	17,376	34,713	8,758	15,724
Sacramento	34,391	35,411	36,997	1,020	2,606
Colusa	13,118	14,285	14,013	1,167	895
Butte	18,721	18,137	17,999	*584	*722
Yolo	11,772	14,099	13,850	2,327	2,078
Yuba	11,270	9,150	9,447	*2,120	*1,823

* Loss.

This is certainly very remarkable. Fresno County has gained in eight years nearly as many as the entire population now of Merced and Stanislaus, both in the same great valley; and yet in 1880 Merced and Stanislaus had fourteen thousand population and Fresno less than ten thousand. In 1880 San Joaquin had over twenty-four thousand population, and Fresno, as we have seen, less than ten thousand, and yet Fresno has almost overtaken San Joaquin.

Los Angeles County has gained in population in eight years almost as many as the population to-day of the entire San Joaquin Valley, including Fresno. Starting with something over seven thousand population in 1880, San Bernardino County has almost overtaken San Joaquin with over twenty-six thousand.

When we look into the Sacramento Valley we find the same disparity of gains. Butte and Yuba Counties have actually lost ground and gone back in eight years, and Yolo has fallen off in the last two years. The gain in Colusa is only about one hundred persons each year, and it is not much better in Sacramento.

The significant fact which I wish to impress upon you is that the great gains in population in this State, with the single exception of Fresno County, are confined to a few counties south of the Tehachapi.

San Bernardino stands at the head of the list of gains, and can any of you tell me why?

Fresno is the only county in your magnificent valley that shows any decided movement forward in population, and can you tell me why?

In that rich and fertile region lying north of you as far as Red Bluff, embracing the finest wheat and fruit lands in the State, with a climate in no material sense different from that south of the Tejon Mountains, we find absolute stagnation so far as increase of population goes.

Where you find desert lands and water on them, there you find the people flocking. The inference is plain. If you expect people to come into your country you must turn your great channels on the surface of the ground and bring land and water together.

In the Sacramento Valley, in Vacaville, in Sacramento, Yolo, Butte, and Tehama Counties, indeed everywhere north of you, deciduous fruits are profitably grown without irrigation. Irrigation is the exception, and yet with this evidence before their eyes, the immigrants do not stop there.

It is my opinion, Mr. President, that two things are wanting in our part of the State; first, water, of which we have an abundance, must be put upon the land; and second, we must develop more enterprise among our people.

You cannot find a community in this State that has benefited largely by our immigration, that has not worked for it, and worked hard and spent money. This is a large State, its attractions are many and widespread. Energetic and desirable people settle down where they find evidences of thrift, and growth, and enterprise, and they will move on until they find these. From what I can learn your people are beginning to realize this.

I cannot stop now to notice in detail the great work you are laying out for yourselves. I cannot overlook, however, the immense enterprise inaugurated in Merced County. It is in harmony with the thought I am seeking to enforce. The men who have ventured a million and a half dollars to make that county yield its treasures heretofore locked up, deserve the gratitude of this whole community and of the State. It is a great enterprise, and is fraught with enormous consequences to you all.

I hear of other enterprises looking to a great system of irrigation for the whole valley. Let them receive every encouragement, for in their success lies the future of this wonderful region.

In all regions of country there must be a center of trade, a commercial rallying point and emporium of exchange. Nature has made the City of Stockton the focal point for the commerce and traffic of this great valley. There is more than a promise that you are to have natural gas in abundance; it seems almost a realization. It would be hard to forecast what this may mean to your business. Here, also, must center the transportation of this expansive and expanding region. It is beyond the power of man to rob you of this splendid commercial advantage. Since I have seen what your two large flour mills are doing and may do in preparing your chief cereal for man's uses, I am almost led to recant and take back my assault upon wheat growing for your valley. Your chief city already has the air and manners of an emporium. Something has brought you to this prosperous and promising condition; some genius of enterprise, public spirit, and liberality, and devotion to local interests, has been the main-spring.

I would not be invidious; and yet I think I may, without mentioning all to whom you are indebted, record now and here the name of one man whose memory will live while Stockton lives, and who is a typical man of affairs and progressive ideas. I halt in my address to offer the health and long life to your Mayor, Hon. L. U. Shippee.

There is everything to encourage your people. Nature has strewn her gifts most bountifully around you. Your magnificent display here in this hall, and at your grounds, shows a development of which you may well be proud; it shows something of the boundless resources of your noble valley, and the almost limitless industrial expansion of which you are capable.

Mr. President, there is a grand future before you. I see in my prophetic vision your treeless plains covered with perpetual verdure, great forests of golden fruit, and wide-spreading meadows of emerald grasses; beautiful homes surrounded with all the comforts of an advanced civilization; churches, schools, everywhere; a clean, healthy, moral, happy people; self-reliant, self-supporting, self-respecting, God-fearing people.

I see along your lines of travel and among your homes, charming towns and villages, where all the arts of the architect and the landscape gardener have supplemented the cultivated taste of the people to show that these heaven-sent gifts are worthily bestowed.

I see this aspiring and ambitious City of Stockton, where your products are now gathered, and where we are now assembled, a large and prosperous center of trade, holding to our metropolis the relation that the City of Philadelphia holds to the metropolis of the East.

A million of people in that future that rises before me will enjoy this fair land of yours, and claim it as their heritage.

You and I, Mr. President, may not see this in the flesh, but the boy and the girl are before me who will witness this crowning glory of this heaven-blessed land, now all your own.

1888. CENTRAL PACIFIC RAILROAD, SPECIAL FREIGHT TARIFF ON GRAIN.

In Carloads of not less than 20,000 Pounds. Rates are in Cents per 2,000 Pounds.

From.	To Stockton.	From.	To Stockton.
Redding	335	Kirkwood	435
Clear Creek	365	Corning	445
Anderson	360	Richfield	450
Klotz Siding	355	Finnell	450
Cottonwood	350	Tehama	450
Buckeye	350		
Hooker	345	Davis	270
Red Bluff	325	Tremont	280
Rawson	325	Dixon	290
Tylers	325	Batavia	295
Tehama	325	Elmira	310
Sesma	325	Cannons	310
Copeland	325	Suisun	270
Vina	320	Teal	260
Soto	315	Goodyears	255
Cana	310	Benicia	230
Anita	305		
Nord	300	Cordelia	300
Shaws	300	Creston	305
Chico	295	Napa Junction	305
Roble	295	South Vallejo	305
Durham	290	Thompson	305
Nelson	285	Napa	305
Silshys	275	Union	305
Biggs	260	Oak Knoll	305
Gridley	245	Truebodys	305
Live Oak	225	Yountville	305
Lomo	220	Oakville	315
Marysville	215	Rutherford	320
Yuba	215	Bello	330
Reeds	215	St. Helena	350
Wheatland	205	Krug	368
Sheridan	205		
Ewing	205	Barro	375
Lincoln	195	Bale	380
Whitneys	190	Walnut Grove	380
		Calistoga	390
Roseville Junction	185		
Antelope	175	Brighton	150
Arcade	160	Florin	135
Haggins Switch	160	Elk Grove	135
American River	160	McConnells	135
Sacramento	150		
		Cicero	210
Merritt	280	Clay	210
Woodland	300	Carbondale	210
Curtis	300	Ione	210
Knights	300		
		Galt	125
Yolo	300	Acampo	90
Blacks	300	Lodi	85
Dunnigans	305		
Harrington	305	Oakdale	145
Arbuckle	305	Burnetts	145
Berlin	305	Clyde	135
Macy	315	Trigo	125
Williams	320	Farmington	110
Colusa Junction		Milton	130
Maxwell	345	Waverly	125
Delavan	345	Peters	95
Norman	355	Holden	85
Logandale	365	Walthal	70
Willows	375	Charleston	70
Lyman	385		
Germantown	395	Stockton	
Greenwood	415	French Camp	75
Orland	415	Lathrop	75
Walton	435	San Joaquin River	125

SPECIAL FREIGHT TARIFF ON GRAIN—Continued.

From.	To Stockton.	From.	To Stockton.
Banta	125	Turlock	160
Tracy	125	Delhi	165
Melrose	240	Livingston	165
Mitchell	240	Arena	170
San Leandro	240	Atwater	180
Lorenzo	240	Merced	195
Haywards	240	Athlone	220
Alvarado Cross Roads	240	Minturn	235
Decoto	240	Berenda	255
Niles	240	Madera	265
		Borden	275
Washington	260	Sycamore	285
Warm Springs	264	Fresno	295
Milpitas	264	Malaga	310
Wayne	264	Fowler	310
San José	264	Selma	320
		Kingsburg	320
Sunol	240	Traver	325
Pleasanton	240	Cross Creek	325
Livermore	240	Goshen	335
Altamont	200		
Midway	160	Hanford	375
Ellis	155	Lemoore	375
		Heinlen	375
Morrano	85	Huron	375
Ripon	95		
Salida	115	Tagus	345
Modesto	135	Tulare	345
Ceres	145	Tipton	350
Keyes	145	Alila	355

RAINFALL IN STOCKTON SINCE 1849.

The following table of the rainfall in Stockton since 1849 was prepared from the records kept at the State Insane Asylum, and is arranged according to the seasons, showing the amount in inches of each month, during thirty-eight years, to January 1, 1889; also the quantity for every month, and the annual amount of rain:

Months.	1849.	1850.	1851.	1852.	1853.	1854.	1855.	1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.
September	0.250	-----	1.000	.003	-----	-----	-----	-----	-----	-----	.025	.063	-----	-----	.003	.004	.080	-----	.030	-----
October	1.500	-----	.180	-----	-----	-----	-----	-----	-----	-----	-----	.914	-----	-----	.355	.120	.480	.001	.620	.130
November	2.250	-----	2.140	6.000	.610	.310	.740	.830	2.406	.147	6.485	181	2.170	.005	1.490	6.718	2.427	2.426	2.160	.620
December	12.500	-----	7.070	13.410	1.350	.230	2.420	2.900	6.632	4.329	1.834	4.282	8.637	2.327	1.815	7.867	.364	3.511	6.480	3.450
Months.	1850.	1851.	1852.	1853.	1854.	1855.	1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	1869.
January	4.500	.650	2.400	2.640	2.900	4.500	1.375	2.444	2.444	.964	2.310	2.668	15.036	1.733	1.077	4.776	7.699	3.440	5.070	4.180
February	0.500	.350	.120	.620	8.940	2.740	4.801	2.461	3.906	.931	.931	2.920	4.260	2.751	.180	.712	2.010	7.104	2.280	3.170
March	10.000	1.880	6.400	2.020	3.600	2.200	.970	2.878	1.637	5.110	3.320	3.320	2.800	2.360	1.303	.481	2.018	1.010	3.510	2.490
April	4.250	1.140	1.90	3.240	3.290	1.60	-----	1.214	.981	2.874	4.75	4.75	8.21	1.693	1.080	1.370	.476	1.805	.560	1.590
May	2.50	.630	.300	.250	.630	.170	-----	2.031	1.037	2.491	.590	.590	1.808	.355	.742	.460	2.252	.008	-----	.820
June	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.107	.135	.011	-----	.087	-----	.100	-----	-----	-----
July	-----	-----	-----	-----	-----	.100	-----	-----	-----	.030	.549	-----	-----	-----	-----	.004	.018	-----	-----	-----
August	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.006	-----	.085	-----	-----	-----	-----	-----
Total	36.000	4.710	17.980	27.403	21.040	11.680	8.370	11.081	18.991	16.041	22.716	15.548	35.549	11.579	7.862	22.512	17.924	25.305	20.710	16.350

RAINFALL IN STOCKTON SINCE 1849—Continued.

MONTHS.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.
September	1.050	.450	.140	.030	.310	1.030	.010	2.110	.330	.340	.580	.---	.003	.500	.180	.190	.---	.---	.27	.88
October	.830	.670	1.090	1.370	.700	3.450	5.830	.300	.720	.510	2.050	.045	.730	1.860	.930	1.400	.---	.22	.52	.270
November	1.550	1.350	11.490	6.250	3.940	.230	2.850	.---	1.310	.420	1.070	7.090	1.650	.270	1.000	5.690	1.240	.82	3.06	2.42
December																				
MONTHS.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	
January	.370	1.470	2.580	.750	3.940	4.540	3.260	3.320	5.450	2.280	1.540	2.830	1.270	2.550	1.940	1.230	5.360	.36	3.36	
February	2.350	1.700	3.460	3.970	1.780	.280	2.650	.230	6.700	2.940	1.320	2.500	.840	.350	4.430	.---	.040	3.78	.48	
March	.990	.300	1.430	.470	3.330	.870	3.230	.750	2.530	2.030	.890	.820	3.040	2.550	6.030	.260	1.210	.21	2.29	
April	.070	.690	.510	.439	.560	.---	.400	.---	1.010	1.750	6.280	1.110	2.210	1.230	2.940	.770	3.430	1.57	.28	
May	.120	.400	.030	.---	.580	.---	.---	.320	.650	.930	1.010	.290	.110	4.840	.500	.---	.---	.---	.55	
June	.310	spring.	.040	.030	.---	.450	.---	.---	.---	.200	.---	.---	.---	.---	1.270	.050	.---	.03	.---	
July							.070	.---	.---	.---	.---	.---	.---	.---	.---	.---	.---	.---	.---	
August																.030	.---	.---	.---	
Total	7.630	6.730	20.800	13.300	15.200	11.140	18.330	7.030	18.760	11.460	15.430	15.090	10.720	15.260	20.360	9.620	17.360	7.83	10.81	

LADIES' GENERAL PAVILION COMMITTEE OF 100,

FOR THE FAIR OF 1888.

Mrs. J. W. Hart.....	Chairwoman.
Miss Carrie Roesch. }	Secretaries, Post Office, Stockton.
Miss Clara Stier }	

SUB-COMMITTEES.

ENTERTAINMENT COMMITTEE.

Mrs. J. M. McCall.....	Chairwoman.
Miss Julia Hahn.....	Assistant Chairwoman.

DECORATION COMMITTEE.

Mrs. W. N. Elsom.....	Chairwoman.
Mrs. C. Haas	Assistant Chairwoman.

NATIVE DAUGHTERS COMMITTEE.

Miss Althea Hickman, Miss Rose Gerlach, Miss Kitty Chalmers, Miss Maggie Davis.

COMMITTEE RECEIVING AND ARRANGING SCHOOL WORK.

Mrs. J. M. LaRue	Chairwoman.
Mrs. L. Basilio.....	Assistant Chairwoman.

COMMITTEE ON JELLIES, PICKLES, CRYSTALLIZED AND CANNED FRUITS.

Mrs. Jos. Hale	Chairwoman.
Mrs. J. C. Reid.....	Assistant Chairwoman.

COMMITTEE ON BABY SHOW.

Mrs. G. DeForce Cluff.....	Chairwoman.
Mrs. E. R. Hedges	Assistant Chairwoman.

COMMITTEE ON CURIOSITY SHOP.

Mrs. L. B. Holt	Chairwoman.
Mrs. J. S. Dunham	Assistant Chairwoman.
Mrs. Frank Bugbee	Secretary.

COMMITTEE ON CURIOSITY.

Mrs. G. DeForce Cluff and Mrs. C. O. Ivory	Lodi.
Mrs. W. W. Ferguson	Linden.
Mrs. Steele	Merced.
Mrs. Jennie Pervis and Mrs. Crow	Modesto.

GRANGE COMMITTEE.

Mrs. Hill.....	Collegeville.	Mrs. Mock.....	Sonora.
Mrs. Geo. Locke.....	Lockeford.	Miss Cabecut.....	Sonora.
Mrs. Sam. Waters	Clements.	Mrs. A. Thornton.....	New Hope.
Mrs. Jos. Adams	Stockton.	Mrs. J. H. Thompson	New Hope.
Mrs. Lucy Goff	Stockton.	Mrs. J. Haslacher	Oakdale.
Mrs. W. D. Ashley	Stockton.	Mrs. Lindsley.....	Staten Island.
Mrs. W. L. Overhiser	Stockton.	Mrs. Peter	Staten Island.
Mrs. O. O. Norton	Lodi.	Mrs. H. Saddlemire.....	Tracy.
Mrs. Geo. Hogan	Lodi.	Miss Vinet.....	Atlanta.
Mrs. Creighton	Campo Seco.	Miss Mamie Elliott	Atlanta.

Appointed to get an exhibit from the Grange.

TRANSACTIONS OF THE

COMMITTEE ON SEA SHELLS.

Mrs. Alice Kafitz ----- Chairwoman.

COMMITTEE ON CUSHIONS AND PILLOWS.

Miss Ada Boschen, Miss Hattie Keep, Miss Clara Leffler, Miss Fannie Brown.

FINANCE COMMITTEE.

Mrs. J. C. Reid, Mrs. J. M. McCall, Miss Julia Hahn.

ENTERTAINMENT COMMITTEE FOR PUBLIC SCHOOLS.

Miss Clara Stier, Miss Ada Boschen.

BICYCLE CLUB COMMITTEE.

C. C. Moore, A. L. Wolf.

CATHOLIC SCHOOL COMMITTEE.

Miss Julia Weber, Mrs. J. J. Nunan.

EINTRACHT GLEE CLUB COMMITTEE.

M. Felchlin, L. Schneider.

NATIVE SONS AND DAUGHTERS COMMITTEE.

Miss Hannah Gray, Miss Althea Hickman, E. C. Owen, A. B. Sperry.

COMMITTEE ON AMATEUR THEATRICALS.

W. B. Starbird, James H. Budd.

REPRESENTATIONS OF SEASONS.

Mrs. S. C. Harry, Mrs. L. E. Benedict.

COMMITTEE ON CONSERVATORY DECORATION.

Miss Lena Bidwell, Chairwoman; Mrs. Milton Hart, Miss Hattie Carson, Miss Lizzie Bates.

EXHIBITS AT THE FAIR—1888.

FIRST DEPARTMENT.

Name of Animal.	Owner.	Address.
CLASS I—THOROUGHBREDS—STALLIONS.		
Rackety Jack, six years old	James McAfee	Stockton.
Fred Archer, four years old	Caleb Dorsey	Oakdale.
March Wind, two years old	Caleb Dorsey	Oakdale.
Suckling colt.	L. U. Shippee	Stockton.
MARES.		
Rachael, four years old	W. R. Ruggles	Stockton.
Salfarara, two years old	L. U. Shippee	Stockton.
Stetto S, two years old	L. U. Shippee	Stockton.
Suckling filly	W. R. Ruggles	Stockton.
Rachael, suckling filly	L. U. Shippee	Stockton.
CLASS II—ROADSTERS—STALLIONS.		
Reliance, Jr., four years old	J. K. Baldwin	Bellota.
Hiram Wilkes, four years old	F. J. Post	Stockton.
Nephew, Jr., four years old	Mrs. M. B. Lam	Stockton.
Hawthorn, nine years old	L. U. Shippee	Stockton.
Argent, five years old	R. H. Walters	San José.
Mt. Vernon, seven years old	J. A. McCloud	Stockton.
Dexter Prince, nine years old	L. M. Morse	Lodi.
Echo, Jr., three years old	S. Hewlett	Stockton.
Wellerton, two years old	J. Boyce	Lockeford.
Harry N, two years old	N. Nevin	Stockton.
Ed, two years old	L. U. Shippee	Stockton.
Nutgrove, two years old	Ed. Topham	Milpitas.
Geo. S, one year old	G. W. Sampson	French Camp.
Cherokee Prince, one year old	Laura J. Jackson	Stockton.
—, one year old	L. U. Shippee	Stockton.
—, one year old	L. U. Shippee	Stockton.
—, one year old	W. A. French	Stockton.
MARES OR GELDINGS.		
Prince, four years old	Nathaniel Peck	Acampo.
Hathaway, four years old	J. F. Visser	Stockton.
Grace, five years old	S. Hewlett	Stockton.
Harvey Mc, four years old	B. E. Harris	San Francisco.
Cordia, four years old	J. H. Haley	Lockeford.
Palladin, five years old	L. U. Shippee	Stockton.
Mag, eight years old	H. F. Gilbert	Modesto.
Bohemian Girl, four years old	R. E. Stowe	Stockton.
Flash, three years old	W. F. Jordan	Stockton.
Carrie Vernon, three years old	J. A. McCloud	Stockton.
Dewdrop, two years old	W. F. Jordan	Stockton.
Kitty Vernon, two years old	George M. French	Stockton.
Miss Fox, two years old	J. A. McCloud	Stockton.
YEARLING FILLIES.		
Josie Williams	George Kneier	Stockton.
Nellie	F. B. Haslam	Stockton.
Flora	L. U. Shippee	Stockton.
Oasis	Lucy P. Goff	Stockton.
Lorina	B. E. Harris	San Francisco.
SPAN OF MATCHED ROADSTERS.		
Lady and Mollie	J. F. Visser	Stockton.
Lady Washington and George	Sargent Bros.	Stockton.
Fearless and Adventure	B. E. Harris	San Francisco.
Homer and Hamlet	L. M. Morse	Lodi.

TRANSACTIONS OF THE
FIRST DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
TROTTING SUCKLING COLT.		
Pilot.....	L. U. Shippee.....	Stockton.
Kismet.....	L. U. Shippee.....	Stockton.
Brentwood.....	B. E. Harris.....	San Francisco.
TROTTING SUCKLING FILLY.		
Flossie.....	L. U. Shippee.....	Stockton.
Rosey.....	L. U. Shippee.....	Stockton.
Blondy.....	W. A. French.....	Stockton.
Maude Vernon.....	A. F. Gilbert.....	Modesto.
CLASS III—HORSES FOR ALL PURPOSES— STALLIONS.		
Wreckman, three years old.....	J. Boyce.....	Lockeford.
Captain Tuft, three years old.....	W. F. Sebley.....	Stockton.
Davy Crockett, eight years old.....	W. T. Smith.....	Farmington.
Ben Allen, sixteen years old.....	W. S. Alexander.....	Stockton.
Enright, three years old.....	W. S. Alexander.....	Stockton.
B D, three years old.....	W. S. Alexander.....	Stockton.
Starlight, two years old.....	J. H. Haley.....	Lockeford.
Prince, two years old.....	F. B. Haslam.....	Stockton.
Ita, two years old.....	Frank Davis.....	Stockton.
Dave, two years old.....	T. H. Bardsley.....	Stockton.
Johnny Vernon, two years old.....	A. Gross.....	Stockton.
Dan Webster, two years old.....	W. S. Alexander.....	Stockton.
Storm, two years old.....	B. E. Harris.....	Stockton.
MARES.		
Fannie, seven years old.....	William Thomas.....	Douglas Flat.
Mollie, six years old.....	William Thomas.....	Douglas Flat.
Flora, six years old.....	N. Nevin.....	Stockton.
Sweetwood, four years old.....	B. E. Harris.....	San Francisco.
Victoria, two years old.....	William Thomas.....	Douglas Flat.
FAMILIES—STALLIONS.		
Mt. Vernon, seven years old, and ten colts.	J. A. McCloud.....	Stockton.
MARES.		
Tempest and four colts.....	L. U. Shippee.....	Stockton.
CLASS IV—DRAFT HORSES—STALLIONS.		
Paris, six years old.....	Nicewonger & Ellenwood.....	Ripon.
Sir Francis, three years old.....	C. P. Allison.....	Lodi.
Len Smith, four years old.....	N. Nevin.....	Stockton.
Wastely, two years old.....	J. M. Ritchie.....	Grayson.
MARES.		
Madame, six years old.....	W. B. Ellenwood.....	Ripon.
CLASS V—DOUBLE CARRIAGE TEAMS.		
Romeo and Dexter.....	Mrs. E. P. Smith.....	Stockton.
Dick and Frank.....	L. U. Shippee.....	Stockton.
Allen and Bruce.....	B. E. Harris.....	San Francisco.
Colonel and Dick.....	Miss Irene Bailey.....	Stockton.
SINGLE CARRIAGE ANIMALS.		
Roscoe Conkling.....	G. W. Sampson.....	French Camp.
Amy H.....	S. Hewlett.....	Stockton.
CLASS VI—SPAN OF MULES.		
Judd and Puss.....	T. J. Pope.....	Stockton.
Ned and Quinn.....	T. J. Pope.....	Stockton.
Mollie and Coley.....	L. U. Shippee.....	Stockton.
CLASS VII—JACKS.		
Bruce, three years old or over.....	I. R. Mickey.....	Milton.
Washington Eclipse, Jr., two years old.....	Levi Carter.....	Ceres.
Goliah, suckling jack.....	L. U. Shippee.....	Stockton.

FIRST DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
JENNIES.		
Lumix, six years old.....	L. U. Shippee	Stockton.
Bird, five years old	L. U. Shippee	Stockton.
Julia, two years old	L. U. Shippee	Stockton.
Maude, one year old	L. U. Shippee	Stockton.
Annie, suckling jenny	L. U. Shippee	Stockton.
CLASS VIII—CATTLE—DURHAMS—BULLS.		
3d Kirklevington of Forest Home (63259), three years old or over	C. Younger & Son.....	San José.
5th Kirklevington of Forest Home (6326), three years old or over	C. Younger & Son.....	San José.
26th Kirklevington of Forest Home (Vol. 34), two years old	C. Younger & Son.....	San José.
Hightower (48383), two years old	C. A. Stowe	Stockton.
Napoleon, one year old	E. S. Beecher.....	Stockton.
CALVES.		
Gilt Edge	C. K. Bailey	Stockton.
.....	L. U. Shippee	Stockton.
43d Kirklevington of Forest Home.....	C. Younger & Son.....	San José.
COWS.		
Jessie Maynard 3d, three years old or over.....	C. Younger & Son.....	San José.
4th Belle of Forest Home, three years old or over	C. Younger & Son.....	San José.
Jessie Maynard 4th, two years old	C. Younger & Son.....	San José.
Amelia 12th, two years old	C. Younger & Son.....	San José.
Oxford Rose 11th, one year old	C. Younger & Son.....	San José.
Nevada Belle (815), one year old	C. Younger & Son.....	San José.
HEIFER CALVES.		
.....	L. U. Shippee	Stockton.
.....	L. U. Shippee	Stockton.
28th Rose of Forest Home	C. Younger & Son.....	San José.
Oxford Rose (1216).....	C. Younger & Son.....	San José.
CLASS X—JERSEY CATTLE—BULLS.		
Billy Ralston (365), three years old or over.....	Thos. Ward	Oakland.
Waterman (328), three years old or over.....	H. S. Sargent.....	Stockton.
Earl Mameluke (7087), three years old or over	Levi Carter	Ceres.
Maud's Olaf (15985), two years old	Thos. Ward	Oakland.
Silver King, one year old	Thos. Ward	Oakland.
CALVES.		
Aloha S (20614)	H. S. Sargent	Stockton.
COWS.		
Lady Maude (333), three years old or over.....	Thos. Ward	Oakland.
Phyllis (298), three years old or over.....	Thos. Ward	Oakland.
Pacific, three years old or over.....	Thos. Ward	Oakland.
Daisy W (700), three years old or over.....	H. S. Sargent.....	Stockton.
Lily Dale (747), three years old or over.....	H. S. Sargent.....	Stockton.
Lockeford Belle (879), two years old	H. S. Sargent.....	Stockton.
Minnie Warren (878), two years old	H. S. Sargent.....	Stockton.
Amy Platt (987), two years old	H. S. Sargent.....	Stockton.
Julia W (984), two years old	H. S. Sargent.....	Stockton.
Anita, two years old	Thos. Ward	Oakland.
Oakland Queen (49034), one year old	Thos. Ward	Oakland.
Olefina (46858), one year old	Thos. Ward	Oakland.
Lady Wickham 2d, one year old	Thos. Ward	Oakland.
Violet, one year old	Thos. Ward	Oakland.
Modjeska (989), one year old	H. S. Sargent.....	Stockton.
Peg Woffington (985), one year old	H. S. Sargent.....	Stockton.
Susie of El Pinal (990), one year old	H. S. Sargent.....	Stockton.

TRANSACTIONS OF THE
FIRST DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
CLASS XII—AYRESHIRE, HEREFORDS, AND HOLSTEINS—BULLS.		
Riopica (1221), three years old or over....	W. H. Mays.....	Stockton.
El Cuorro of Netherland (3336), two years old	F. H. Burke.....	Menlo Park.
King of Menlo (6497), one year old	F. H. Burke.....	Menlo Park.
CALVES.		
Stockton (4453).....	W. F. Sibley.....	Stockton.
.....	F. H. Burke.....	Menlo Park.
Aggie Cathleen's Pride (9126)	F. H. Burke.....	Menlo Park.
Lodi	W. H. Mays.....	Stockton.
COWS.		
Sylpha (6964), three years old or over	F. H. Burke.....	Menlo Park.
Thissa (9679), three years old or over	F. H. Burke.....	Menlo Park.
Kyeless (8533), three years old or over	F. H. Burke.....	Menlo Park.
Duchess of Oak Grove (3966), three years old or over	W. H. Mays.....	Stockton.
Onterette (4020), two years old	F. H. Burke.....	Menlo Park.
Boulanga (6659), one year old	F. H. Burke.....	Menlo Park.
CALVES.		
Princess Tryntze (7837)	E. S. Beecher.....	Stockton.
Xeboo	W. F. Sibley.....	Stockton.
Bontje Lincoln 2d (11804)	F. H. Burke.....	Menlo Park.
CLASS XIII—HERDS—DURHAMS.		
3d Kirklevington of Forest Home; Jessie Maynard 3d, Jessie Maynard 4th, 4th Belle of Forest Home, Amelia 12th	C. Younger & Son.....	San José.
AYRESHIRE, HEREFORD, OR HOLSTEIN.		
El Cuorro of Netherland; Sylpha, Kye- less, Onterette, Boulanga	F. H. Burke.....	Menlo Park.
JERSEY.		
Maud's Olaf; Lady Maude, Phyllis, Anita. Oakland Queen	Thos. Ward.....	Oakland.
Waterman; Daisy W, Lily Dale, Amy Platt, Modjeska	H. S. Sargent.....	Stockton.
CLASS XV—SHEEP.		
Just Right, Cotswold ram	C. Younger & Son.....	San José.
One pen Cotswold ewes	C. Younger & Son.....	San José.
CLASS XVI—SWINE—ESSEX AND BERKSHIRE.		
Boar, four months old	W. A. French.....	Stockton.
Boar	L. U. Shippee.....	Stockton.
Boar, five months old	L. U. Shippee.....	Stockton.
Sow, one year old	W. A. French.....	Stockton.
Sow, four months old	W. A. French.....	Stockton.
Sow	L. U. Shippee.....	Stockton.
Sow	L. U. Shippee.....	Stockton.
Sow	L. U. Shippee.....	Stockton.
Sow and four pigs	L. U. Shippee.....	Stockton.
CLASS XVII—POULTRY.		
Three pair Plymouth Rocks	L. U. Shippee.....	Stockton.
Three pair Brown Leghorns	W. A. French.....	Stockton.
One pair White Leghorns	Thos. Ward.....	Oakland.
Two pair Bantams	W. J. Hicox.....	Stockton.
One pair Rouen ducks	F. H. Burke.....	Menlo Park.
One pair Pekin ducks	F. H. Burke.....	Menlo Park.
One pair Toulouse geese	F. H. Burke.....	Menlo Park.
One trio turkeys	F. H. Burke.....	Menlo Park.

SECOND DEPARTMENT.

Articles Exhibited.	EXHIBITOR.	Address.
AGRICULTURAL IMPLEMENTS.		
One header	Matteson & Williamson	Stockton.
One lightning hay press	S. C. H. and A. Works	Stockton.
Two combined chod crushers, harrow, pulverizer, and leveler	Weinstock & Lubin	Sacramento.
One combined harvester	Matteson & Williamson	Stockton.
One roller seed sower and harrow com- bined	Matteson & Williamson	Stockton.
Two combined harvesters	S. C. H. and A. Works	Stockton.
Display of machinery from one shop	S. C. H. and A. Works	Stockton.
One improved Lincoln V belt combined header and thrasher	Holt Bros.	Stockton.
One combined seeder, harrow, roller, and leveler	Octave Granville	Stockton.
CLASS I—FARM PRODUCTS.		
Six varieties wheat, one hundred pounds each	J. D. Huffman	Lodi.
Three varieties barley, one hundred pounds each, shown by one exhibitor	J. D. Huffman	Lodi.
Fifty pounds rye	J. D. Huffman	Lodi.
Five pounds English walnuts	Mrs. W. B. West	Stockton.
Five pounds soft-shelled almonds	Mrs. Jos. Hale	Stockton.
CLASS II—VEGETABLES.		
Large variety vegetables raised on one ranch, and exhibited by the producer	L. U. Shippee	Stockton.
Large variety vegetables raised on one ranch, and exhibited by the producer	Mrs. C. C. Castle	Stockton.
Large exhibit of vegetables, fruit, etc. by one person	L. U. Shippee	Stockton.
Large variety vegetables raised on one ranch and exhibited by the producer	Allen Reid	Stockton.
Large variety vegetables	J. D. Huffman	Lodi.
CLASS III—GRAINS AND GRASSES.		
Thirty bundles grain, not less than seven varieties	J. D. Huffman	Lodi.
Most artistically arranged display of grain	J. D. Huffman	Lodi.
Most artistically arranged display of Cal- ifornia grasses	J. D. Huffman	Lodi.
CLASS V—HORTICULTURAL DEPARTMENT.		
Collection of apples	J. Putnam	Clements.
Collection of apples	L. U. Shippee	Stockton.
Collection five varieties of apples	L. U. Shippee	Stockton.
Collection of pears	L. U. Shippee	Stockton.
Collection of pears	J. Putnam	Clements.
Collection five varieties of pears	L. U. Shippee	Stockton.
Collection three varieties pears, five each	L. U. Shippee	Stockton.
Collection of peaches	T. J. Stephens	Stockton.
Collection of peaches	J. Putnam	Clements.
Collection of peaches	L. U. Shippee	Stockton.
Collection twelve peaches, any variety	Mrs. Jos. Hale	Stockton.
Collection twelve peaches, any variety	L. U. Shippee	Stockton.
Collection of nectarines	L. U. Shippee	Stockton.
Collection twelve specimens of quinces	Ada Learned	Stockton.
Collection twelve specimens of quinces	Mrs. Jos. Hale	Stockton.
Collection twelve specimens of quinces	L. U. Shippee	Stockton.
Collection of pomegranates	Mrs. G. S. Allard	Stockton.
Collection of pomegranates	Ada Learned	Stockton.
Collection of pomegranates	L. U. Shippee	Stockton.
Collection of apricots	L. U. Shippee	Stockton.
Collection of plums, named varieties, six each	L. U. Shippee	Stockton.
Collection of twelve plums of one variety	L. U. Shippee	Stockton.
Collection of prunes	L. U. Shippee	Stockton.
Collection of oranges	L. U. Shippee	Stockton.

SECOND DEPARTMENT—Continued.

Articles Exhibited.	EXHIBITOR.	Address.
Miscellaneous display of fruit, nuts, etc.	Placer County	Placer County.
Miscellaneous display of fruit, nuts, etc.	Nevada County	Nevada County.
Miscellaneous display of peaches	— Nickerson	Nevada County.
Miscellaneous display of vegetables, etc.	A. Chebt	Sunol.
Miscellaneous display of melons, squash, etc.	John Boggs	Colusa.
Miscellaneous display of nuts, apples, etc.	Amador County	Amador County.
Miscellaneous display of grapes, pecans, etc.	D. A. Learned	Stockton.
Miscellaneous display of pomegranates, etc.	T. E. Ketchum	Stockton.
Miscellaneous display of grapes	J. Putnam	Clements.
Collection of grapes	Ada Learned	Stockton.
Collection of grapes	Frank West	Stockton.
Collection of grapes	L. U. Shippee	Stockton.
Collection of five varieties grapes	T. J. Stephens	Stockton.
Collection of five varieties grapes	Ada Learned	Stockton.
Collection of five varieties grapes	L. U. Shippee	Stockton.
Single variety grapes	T. J. Stephens	Stockton.
Single variety grapes	Ada Learned	Stockton.
Single variety grapes	L. U. Shippee	Stockton.
Collection of eight bunches raisin grapes.	Ada Learned	Stockton.
Collection of eight bunches raisin grapes.	L. U. Shippee	Stockton.
Collection of figs	Mrs. Jos. Hale	Stockton.
Collection of figs	L. U. Shippee	Stockton.
Collection of figs	Allen Reid	Stockton.
Collection of six specimens figs	Allen Reid	Stockton.
Collection of six specimens figs	L. U. Shippee	Stockton.
Collection of olives	L. U. Shippee	Stockton.
Largest and best exhibit of fruit	J. Putnam	Clements.
Largest and best exhibit of fruit	J. D. Huffman	Lodi.
Largest and best exhibit of fruit	L. U. Shippee	Stockton.
Largest and best exhibit of fruit raised in the district by one person	L. U. Shippee	Stockton.
CLASS V—DRIED FRUITS.		
Box of prunes	T. J. Stephens	Stockton.
Two boxes of prunes	Mrs. Jos. Hale	Stockton.
Two boxes of raisins	Mrs. Jos. Hale	Stockton.
Box of figs	T. J. Stephens	Stockton.
Ten boxes of figs	Mrs. Jos. Hale	Stockton.
Box of plums	T. J. Stephens	Stockton.
Box of peaches	T. J. Stephens	Stockton.
Box of pears	T. J. Stephens	Stockton.
Box of apricots	T. J. Stephens	Stockton.
Two boxes of apricots	Mrs. Jos. Hale	Stockton.
Box of nectarines	T. J. Stephens	Stockton.
FRUIT IN JARS.		
Exhibit of fruits preserved in spirits	Mrs. J. C. Reid	Stockton.
Exhibit of fruits preserved in spirits	Mrs. Jos. Hale	Stockton.
Exhibit of fruits preserved in sugar	Mrs. J. C. Reid	Stockton.
Exhibit of fruits preserved in sugar	Mrs. Jos. Hale	Stockton.
Exhibit of jellies	Mrs. J. C. Reid	Stockton.
Exhibit of jellies	Mrs. Jos. Hale	Stockton.
Exhibit of canned goods (twelve dozen)	Mrs. Jos. Hale	Stockton.
Exhibit of assortment of pickles	Mrs. J. C. Reid	Stockton.
Exhibit of assortment of pickles	Mrs. Jos. Hale	Stockton.
Exhibit of cucumber pickles	Mrs. J. C. Reid	Stockton.
Assortment of crystallized fruit	Mrs. Jos. Hale	Stockton.
Assortment of tomato catsup	Mrs. Jos. Hale	Stockton.
CLASS VI—HOME WORK.		
Best cheese (57½ pounds)	Stockton Cheese Factory	Stockton.
CLASS VII—FLORAL.		
Collection of flowering plants in bloom	Mrs. R. S. Bates	Stockton.
Collection of ornamental foliage plants	Mrs. R. S. Bates	Stockton.
Collection of new and rare plants	Mrs. R. S. Bates	Stockton.

SECOND DEPARTMENT—Continued.

Articles Exhibited.	EXHIBITOR.	Address.
Display of cut flowers to be kept fresh during the Fair by replacing	Mrs. R. S. Bates	Stockton.
Display of bouquets	Mrs. R. S. Bates	Stockton.
Collection of plants suitable for greenhouse, conservatory, and window culture	Mrs. R. S. Bates	Stockton.
Display of hanging baskets containing plants	Mrs. R. S. Bates	Stockton.
Display of ornamental grasses	Mrs. R. S. Bates	Stockton.
Display of single floral piece	Mrs. Bruce Harrison	Stockton.
CULINARY.		
Brown bread	Mrs. Jos. Hale	Stockton.
White bread	Mrs. L. Goodfriend	Stockton.
White bread	Mrs. J. C. Reid	Stockton.
White bread	Mrs. Jos. Hale	Stockton.
White bread	Mrs. Ed. Byrnes	Stockton.
White bread	Maggie Grant	Stockton.
Graham bread	Mrs. Jos. Hale	Stockton.
Gingerbread	Mrs. Jos. Hale	Stockton.
Corn bread	Mrs. J. C. Reid	Stockton.
Corn bread	Mrs. H. E. Williamson	Stockton.
Corn bread	Mrs. Jos. Hale	Stockton.
Plate of biscuit	Miss K. T. Kelly	Stockton.
Plate of biscuit	Mrs. H. E. Williamson	Stockton.
Plate of biscuit	Mrs. Jos. Hale	Stockton.
Fruit cake	Mrs. J. C. Reid	Stockton.
Fruit cake	Mrs. H. E. Williamson	Stockton.
Fruit cake	Mrs. Jos. Hale	Stockton.
Pound cake	Mrs. H. E. Williamson	Stockton.
Sponge cake	Mrs. L. C. Thom	Stockton.
Jelly cake	Mrs. J. C. Reid	Stockton.
Jelly cake	Mrs. H. E. Williamson	Stockton.
Jelly cake	Mrs. Ed. Byrnes	Stockton.
Chocolate cake	Mrs. L. C. Thom	Stockton.
Chocolate cake	Mrs. H. E. Williamson	Stockton.
Chocolate cake	Mrs. J. C. Reid	Stockton.
Nut cake	Mrs. J. C. Reid	Stockton.
Nut cake	Mrs. Jos. Hale	Stockton.
Cocoanut cake	Mrs. L. C. Thom	Stockton.
Cocoanut cake	Mrs. H. E. Williamson	Stockton.
Angel cake	Mrs. L. C. Thom	Stockton.
Plate of doughnuts	Mrs. H. E. Williamson	Stockton.
Plate of doughnuts	Miss K. T. Kelly	Stockton.

THIRD DEPARTMENT.

Articles Exhibited.	EXHIBITOR.	Address.
CLASS I—AGRICULTURAL IMPLEMENTS.		
Wheat drill	Truman, Hooker & Co.	San Francisco.
Mowing machine	H. C. Shaw	Stockton.
Mowing machine, six feet	M. Murphy	Stockton.
Mowing machine, four and one half feet	M. Murphy	Stockton.
Mowing machine	John Caine	Stockton.
Mowing machine	M. P. Henderson & Son	Stockton.
Mowing machine	Grangers Union	Stockton.
Potato digger	Grangers Union	Stockton.
Combined clod crusher, harrow, pulverizer, and leveler	Grangers Union	Stockton.
Plow for all purposes	H. C. Shaw	Stockton.
Plow for all purposes	Truman, Hooker & Co.	San Francisco.
Plow for all purposes	M. P. Henderson & Son	Stockton.
Plow for all purposes	Grangers Union	Stockton.
Gang plow	H. C. Shaw	Stockton.

THIRD DEPARTMENT—Continued.

Articles Exhibited.	EXHIBITOR.	Address.
Gang plow.....	Truman, Hooker & Co.....	San Francisco.
Gang plow.....	John Caine.....	Stockton.
Gang plow.....	Matteson & Williamson.....	Stockton.
Gang plow.....	M. P. Henderson & Son.....	Stockton.
Gang plow.....	Grangers Union.....	Stockton.
Sulky plow.....	H. C. Shaw.....	Stockton.
Sulky plow, "four".....	S. C. H. and A. Works.....	Stockton.
Sulky plow.....	Truman, Hooker & Co.....	Stockton.
Sulky plow.....	Matteson & Williamson.....	Stockton.
Sulky plow.....	M. P. Henderson & Son.....	Stockton.
Fanning mill.....	S. C. H. and A. Works.....	Stockton.
Farm gate.....	Drum & Cameron.....	Sacramento.
Grain cleaning attachment for thrasher.....	S. C. H. and A. Works.....	Stockton.
Grain cleaner, independent.....	S. C. H. and A. Works.....	Stockton.
Harrow.....	Truman, Hooker & Co.....	San Francisco.
Three-section wood harrow.....	Matteson & Williamson.....	Stockton.
Harrow.....	M. P. Henderson & Son.....	Stockton.
Harrow.....	H. C. Shaw.....	Stockton.
Horse rake.....	M. P. Henderson & Son.....	Stockton.
Hay and straw cutter.....	Grangers Union.....	Stockton.
Derrick fork.....	Grangers Union.....	Stockton.
Display of haying and harvesting tools.....	M. P. Henderson & Son.....	Stockton.
Farm wagon for all purposes.....	M. P. Henderson & Son.....	Stockton.
Four-furrow gang plow.....	Truman, Hooker & Co.....	San Francisco.
Farm wagon.....	John Caine.....	Stockton.
Farm wagon.....	H. C. Shaw.....	Stockton.
Bradley Garden City two-furrow gang plow.....	Truman, Hooker & Co.....	San Francisco.
Grain sower.....	Truman, Hooker & Co.....	San Francisco.
Grain sower.....	Grangers Union.....	Stockton.
CLASS II—MACHINERY, BLACKSMITH WORK, ETC.		
Display of agricultural implements, California manufacture.....	S. C. H. and A. Works.....	Stockton.
Display of steam engines, California manufacture.....	Strait & Cadle.....	Stockton.
Windmill (Davis Mill).....	R. F. Wilson.....	Stockton.
Windmill (Tempest Mill).....	A. L. Davis.....	Stockton.
CLASS III—TOOLS AND HOUSEHOLD IMPLEMENTS.		
Churn.....	Grangers Union.....	Stockton.
Churn.....	Smith & Martin.....	Stockton.
Washing machine.....	H. C. Shaw.....	Stockton.
Washing machine.....	Grangers Union.....	Stockton.
Wine press.....	H. C. Shaw.....	Stockton.
Wine press.....	Grangers Union.....	Stockton.
Display of horseshoes, hand-made.....	Boyd & Morgan.....	Stockton.
CLASS IV—VEHICLES.		
Best and largest display.....	M. P. Henderson & Son.....	Stockton.
Best and largest display.....	H. C. Shaw.....	Stockton.
Family carriage.....	H. C. Shaw.....	Stockton.
Family carriage.....	M. Murphy.....	Stockton.
Family carriage.....	John Caine.....	Stockton.
Family carriage.....	M. P. Henderson & Son.....	Stockton.
Top buggy.....	H. C. Shaw.....	Stockton.
Top buggy, end springs.....	M. Murphy.....	Stockton.
Top buggy, side bar.....	M. Murphy.....	Stockton.
Top buggy.....	M. P. Henderson & Son.....	Stockton.
Open buggy.....	H. C. Shaw.....	Stockton.
Open buggy.....	M. P. Henderson & Son.....	Stockton.
Two-seated open wagon.....	H. C. Shaw.....	Stockton.
Two-seated open wagon.....	M. P. Henderson & Son.....	Stockton.
Trotting wagon.....	H. C. Shaw.....	Stockton.
Trotting wagon.....	John Caine.....	Stockton.
Trotting wagon.....	M. P. Henderson & Son.....	Stockton.
Spring market wagon.....	H. S. Shaw.....	Stockton.

THIRD DEPARTMENT—Continued.

Articles Exhibited.	EXHIBITOR.	Address.
Spring market wagon.....	M. Murphy.....	Stockton.
Spring market wagon.....	M. P. Henderson & Son.....	Stockton.
Ladies' phaeton.....	H. C. Shaw.....	Stockton.
Ladies' phaeton, leather top.....	M. Murphy.....	Stockton.
Ladies' phaeton.....	M. Murphy.....	Stockton.
Ladies' phaeton.....	M. P. Henderson & Son.....	Stockton.
Wagon and carriage brake.....	M. P. Henderson & Son.....	Stockton.
Carriage springs.....	M. P. Henderson & Son.....	Stockton.
Buckboard.....	H. C. Shaw.....	Stockton.
Buckboard.....	M. P. Henderson & Son.....	Stockton.
Track sulky.....	H. C. Shaw.....	Stockton.
Track sulky.....	M. P. Henderson & Son.....	Stockton.
Buggy tops.....	M. Murphy.....	Stockton.
Family surrey.....	M. Murphy.....	Stockton.
Display of carriage materials, wheels, and trimmings.....	M. P. Henderson & Son.....	Stockton.
Display of vehicles manufactured in Cal.....	M. P. Henderson & Son.....	Stockton.

FOURTH DEPARTMENT.

Articles Exhibited.	EXHIBITOR.	Address.
CLASS I—PAINTING AND DRAWING.		
Specimen of marine painting.....	Walter E. Steves.....	Stockton.
Specimen of marine painting.....	Mrs. G. A. Atherton.....	Stockton.
Specimen of portait painting.....	J. P. Spooner.....	Stockton.
Four oil portraits copied from other painters.....	J. P. Spooner.....	Stockton.
One oil portrait by Gardelle in 1734.....	J. P. Spooner.....	Stockton.
Specimen of portrait painting.....	Joseph Gayette.....	Stockton.
Specimen of portrait painting.....	Mrs. G. S. Allard.....	Stockton.
Specimen of portrait painting.....	Walter E. Steves.....	Stockton.
Specimen of figure painting.....	Mrs. M. H. Ober.....	San Francisco.
Specimen of figure painting.....	Walter E. Steves.....	Stockton.
Specimen of figure painting.....	J. P. Spooner.....	Stockton.
Specimen of figure painting.....	Mrs. G. S. Allard.....	Stockton.
Specimen of landscape painting.....	Mrs. J. L. Beecher.....	Stockton.
Specimen of landscape painting.....	Mrs. G. A. Atherton.....	Stockton.
Specimen of landscape painting.....	Miss Alma Clapp.....	Stockton.
Specimen of animal painting.....	Walter E. Steves.....	Stockton.
Specimen of animal painting.....	Miss Alma Clapp.....	Stockton.
Specimen of flower painting.....	Mrs. J. L. Beecher.....	Stockton.
Specimen California wild flowers.....	Mrs. G. S. Allard.....	Stockton.
Specimen flower painting.....	Walter E. Steves.....	Stockton.
Specimen fruit painting.....	Walter E. Steves.....	Stockton.
General exhibition of paintings in oil.....	Walter E. Steves.....	Stockton.
Specimen of plaque painting.....	Mrs. G. A. Atherton.....	Stockton.
Specimen flower painting.....	Mrs. G. A. Atherton.....	Stockton.
Specimen fruit painting.....	Mrs. G. A. Atherton.....	Stockton.
General exhibition of paintings in oil.....	Mrs. G. A. Atherton.....	Stockton.
Specimen flower painting.....	Miss Alma Clapp.....	Stockton.
Specimen wild flowers painting.....	Miss Alma Clapp.....	Stockton.
Specimen fruit painting.....	Miss Alma Clapp.....	Stockton.
Specimen plaque painting.....	Mrs. J. C. McCall.....	Stockton.
Special exhibition of twenty-four oil paintings.....	Norton Bush.....	Sacramento.
Specimen of pencil drawing.....	St. Mary's College.....	Stockton.
Specimen of California flowers.....	Mrs. G. S. Allard.....	Stockton.
Specimen of landscape painting.....	Miss N. Littlehale.....	Stockton.
Specimen of flower painting.....	Miss N. Littlehale.....	Stockton.
Basket of wild flowers.....	Mrs. G. S. Allard.....	Stockton.
Crayon drawings.....	W. J. Young.....	Stockton.
Four colored crayon drawings, portraits.....	J. P. Spooner.....	Stockton.
Eleven black crayon portraits.....	J. P. Spooner.....	Stockton.
Four large plain photographs.....	J. P. Spooner.....	Stockton.

TRANSACTIONS OF THE
FOURTH DEPARTMENT—Continued.

Articles Exhibited.	EXHIBITOR.	Address.
Photographs of exhibits in pavilion, 1887	J. P. Spooner	Stockton.
Photographs of Sixth Infantry Band	J. P. Spooner	Stockton.
Six plain photographs, all styles	J. P. Spooner	Stockton.
Crayon drawing	Mrs. W. O. Robinson	Stockton.
Crayon drawing	Walter E. Steves	Stockton.
Pen drawings	Miss N. Littlehale	Stockton.
Penmanship	F. E. Cook	Stockton.
Two portraits, crayon	Miss Alma Clapp	Stockton.
Lineal system of teaching geography	W. M. Bours	Stockton.
CLASS II—ORNAMENTAL PAINTING.		
Painting on bolting cloth	Mrs. G. S. Allard	Stockton.
Painting on mirror	Mrs. G. S. Allard	Stockton.
Painting on mirror	Walter E. Steves	Stockton.
Crayon sketch, "Near Stockton"	Walter E. Steves	Stockton.
Collection of paintings, all by one person	Walter E. Steves	Stockton.
Collection of paintings, all by one person	J. P. Spooner	Stockton.
Panel paintings	Mrs. G. A. Atherton	Stockton.
Painted tile	Mrs. G. A. Atherton	Stockton.
Black and white paintings	Mrs. G. A. Atherton	Stockton.
Painting on silk	Mrs. G. A. Atherton	Stockton.
Collection of paintings by one person	Miss N. Littlehale	Stockton.
Painting on china	Mrs. S. E. Dorr	Stockton.
Painting on china	Mrs. J. C. McCall	Stockton.
Luster painting	Miss A. C. Clapp	Stockton.
Kensington painting	Miss A. C. Clapp	Stockton.
CLASS III—SILK CULTURE.		
Display of silk cocoons	Mrs. J. D. Utt	Stockton.
Display of silk cocoons	Mrs. J. C. Reid	Stockton.
Display of silk cocoons, wild and tame	Joseph Neumann	San Francisco.
Display of reeled silk	Mrs. J. D. Utt	Stockton.
Display of reeled silk	Joseph Neumann	San Francisco.
Display of reeled silk	Mrs. J. C. Reid	Stockton.
Display of domestic silk, raised and manufactured in California	Joseph Neumann	San Francisco.
CLASS IV—NEEDLEWORK, ETC.		
Cross-stitch, sofa pillow	Mrs. R. W. Miller	Stockton.
Kensington tidy in silk	Mrs. R. W. Miller	Stockton.
Cotton crochet, tidy	Mrs. R. W. Miller	Stockton.
Etching-stitch, apron	Mrs. R. W. Miller	Stockton.
Embroidery, arrasene	Mrs. Charles Wagner	Stockton.
Embroidery, chenille	Mrs. Charles Wagner	Stockton.
Carriage afghan	Miss M. P. Marshall	Stockton.
Silk embroidery on flannel	Miss W. Fullerton	Stockton.
Embroidery etching	Miss W. Fullerton	Stockton.
Specimen in etching	Miss W. Fullerton	Stockton.
Crochet shawl	Mrs. W. B. West	Stockton.
Carriage afghan	Mrs. W. B. West	Stockton.
Embroidery, arrasene	Mrs. W. B. West	Stockton.
Embroidery, tinsel	Mrs. Joseph Hale	Stockton.
Specimen in etching	Mrs. Joseph Hale	Stockton.
Embroidery, kensington in silk	Mrs. J. C. McCall	Stockton.
Embroidery, arrasene	Mrs. J. C. McCall	Stockton.
Embroidery, kensington in wool	Mrs. J. C. McCall	Stockton.
Embroidery, raised	Mrs. J. C. McCall	Stockton.
Embroidery, tinsel	Mrs. J. C. McCall	Stockton.
Embroidery, arrasene, table scarf	Mrs. J. L. Beecher	Stockton.
Hand-made lace	Mrs. J. G. Giovanessi	Stockton.
Cotton-knitted tidy	Mrs. J. G. Giovanessi	Stockton.
Worsted-knitted tidy	Mrs. J. G. Giovanessi	Stockton.
Cotton-knitted sofa cushion	Mrs. J. G. Giovanessi	Stockton.
Silk-knitted purse	Mrs. J. G. Giovanessi	Stockton.
Spanish drawn work	Mrs. Madeline Cabezet	Sonora.
Display of drawn thread work	Mrs. Madeline Cabezet	Sonora.
Hand-made lace	Mrs. J. D. Utt	Stockton.
Spanish drawn work	Mrs. J. D. Utt	Stockton.
Lace handkerchief	Mrs. J. D. Utt	Stockton.

FOURTH DEPARTMENT—Continued.

Articles Exhibited.	EXHIBITOR.	Address.
Hand-made lace	Miss Fannie Thompson	Stockton.
Cotton knitting	Miss Fannie Thompson	Stockton.
Toilet set in scam	Mrs. R. W. Miller	Stockton.
Hemstitched handkerchief	Mrs. R. W. Miller	Stockton.
Spanish drawn work	Mrs. S. E. Dorr	Stockton.
Drawn thread work	Mrs. S. E. Dorr	Stockton.
Hand-made lace	Mrs. S. E. Dorr	Stockton.
Hemstitching	Mrs. S. E. Dorr	Stockton.
Fancy apron for ladies	Miss L. F. Booker	Stockton.
Darned net	Miss W. Fullerton	Stockton.
Hand-made lace	Miss W. Fullerton	Stockton.
Lace handkerchief	Miss W. Fullerton	Stockton.
Display of fancy work	Mrs. W. O. Robinson	Stockton.
Fancy aprons for ladies	Mrs. Jos. Hale	Stockton.
Worsted knitting	Mrs. J. C. Reid	Stockton.
Ornamental perfume satchel	Mrs. J. C. McCall	Stockton.
Display of hand-knit underwear	Mrs. Pennell	Stockton.
Worsted skirt	Mrs. J. D. Utt	Stockton.
Crazy quilt	Miss Fannie Thompson	Stockton.
Patchwork quilt	Miss Fannie Thompson	Stockton.
Crazy quilt	Mrs. M. P. Marshall	Stockton.
Shell work	Mrs. J. W. Hart	Stockton.
Calico dress, by miss under fourteen years old	Miss Dorr	Stockton.
Calico dress, by miss over fourteen years old	Miss Castle	Stockton.
Hair flowers	Mrs. M. Netz	Stockton.
Crazy quilt	Miss W. Fullerton	Stockton.
Drawn rug	Mrs. Joseph Hale	Stockton.
Braided rug	Mrs. Joseph Hale	Stockton.
Two worsted skirts	Mrs. Joseph Hale	Stockton.
Knitted slumber robe	Mrs. Joseph Hale	Stockton.
Pair silk stockings	Mrs. Joseph Hale	Stockton.
Table scarf	Mrs. Joseph Hale	Stockton.
Table cover	Mrs. Joseph Hale	Stockton.
Drawn rug	Mrs. M. Netz	Stockton.
Table scarf	Mrs. J. C. McCall	Stockton.
Table cover	Mrs. J. C. McCall	Stockton.
Patchwork quilt	Mrs. Harvey Belden	Stockton.
Embroidered lambrequin	Mrs. J. L. Beecher	Stockton.
Silk knitted purse	Miss F. Leon	Stockton.
Paper flowers	Miss Bessie Austin	Stockton.
Case of fancy work	Mrs. Mitchell	Stockton.
CLASS VI—DISPLAYS.		
Cigars and tobaccos, raised in county	Alonzo Rhodes	Stockton.
Tobaccos, raised in county	John O'Malley	Atlanta.
Groceries	Liebenbaum Bros.	San Francisco.
Druggist sundries	I. D. Holden	Stockton.
Druggist sundries	R. C. Leffler	Stockton.
Druggist sundries	H. H. Moore & Sons	Stockton.
Hats and caps	Lathrop & Noble	Stockton.
Dry goods	Alex. Chalmers	Stockton.
Cloaks and wraps	Alex. Chalmers	Stockton.
Ribbons	Alex. Chalmers	Stockton.
Millinery	Misses A. and H. Fyfe	Stockton.
Ladies and children's underwear	Mrs. M. H. Ober	Stockton.
Ornamental drawings	J. Barricklo, St. Mary's Col'ge	Stockton.
Mechanical drawing	J. Larkin, St. Mary's Col'ge	Stockton.
Map drawing	J. Garrow, St. Mary's Col'ge	Stockton.
Millinery	Mrs. M. Netz	Stockton.
Hats and bonnets	Mrs. M. Netz	Stockton.
Feathers	Mrs. M. Netz	Stockton.
Flowers	Mrs. M. Netz	Stockton.
Ribbons	Mrs. M. Netz	Stockton.
Children's millinery	Mrs. M. Netz	Stockton.
Stoves	Jackson & Earle	Stockton.
Hardware and electrical goods	Austin Bros.	Stockton.
Musical instruments	A. L. Bancroft & Co.	San Francisco.

FOURTH DEPARTMENT—Continued.

Articles Exhibited.	EXHIBITOR.	Address.
Musical instruments	Benjamin Curtaz & Son	San Francisco.
Saratoga chips	Liebenbaum Bros.	San Francisco.
Hawley's bar sugar	Liebenbaum Bros.	San Francisco.
California plum pudding	Liebenbaum Bros.	San Francisco.
Jellies and jams by factory	Liebenbaum Bros.	San Francisco.
California sweet oil	Liebenbaum Bros.	San Francisco.
Imported sweet oil	Liebenbaum Bros.	San Francisco.
COUNTY EXHIBITS.		
San Joaquin County	Pomona Grange	Stockton.
Nevada County .....	.....	.....
Placer County .....	.....	.....
Alameda County .....	.....	.....
Colusa County .....	.....	.....
MISCELLANEOUS.		
Love button-hole and family sewing machine	H. A. Hebard	San Francisco.
Love tinsel embroidery machine	H. A. Hebard	San Francisco.
Love dresswork, button-hole, and over-seaming machine	H. A. Hebard	San Francisco.
Walker's Australian wire-stretcher	California Wire Works	San Francisco.
Miniature ship	Frank Loerovich	Stockton.
Apple-paring machine	Truman, Hooker & Co.	San Francisco.
Damascus creme and poudre Cashinarian dew	Stoddard Bros.	San Francisco.
Dr. Liebig's German invigorator	Stoddard Bros.	San Francisco.
Grain trucks	Matteson & Williamson	Stockton.
Three single plows	Matteson & Williamson	Stockton.
Wheelbarrow	Matteson & Williamson	Stockton.
Four pair stretchers	Matteson & Williamson	Stockton.
Automatic horse-feeder	S. B. Stretton	San Francisco.
Stereotyper	Chronicle	San Francisco.
Capillaris	Mrs. H. Works	Oakland.
Display of soaps	Capital Soap Works	Sacramento.
Mill work	P. A. Buell & Co.	Stockton.
Wine tank	P. A. Buell & Co.	Stockton.
Hawkeye fence machine	L. H. Evans	Stockton.
Guinea pigs and chipmunks	Willie Hickox	Stockton.
Gale seeder and harrow	Truman, Hooker & Co.	San Francisco.
Silver model of gang plow	Truman, Hooker & Co.	San Francisco.
Domestic sewing machines	J. E. Wood	Stockton.
Estey organ	J. E. Wood	Stockton.
Vigor of Life	P. Clark	Sacramento.
Shaw's slip share gang plow	H. C. Shaw Plow Company	Stockton.
Wooden mantel	P. A. Buell & Co.	Stockton.
Furniture and wood carvings, Stockton manufacture	M. Schneider	Stockton.
Bradley tule plow	T. Hooker & Co.	San Francisco.
Hickory nuts, hazel nuts, pecans, black walnuts, papaws, Japanese persimmons, peaches, etc.	R. Lucas	Camanche.
Display of wheat, flour, germea, etc.	Sperry & Co.	Stockton.
Pastele portraits	J. P. Spooner	Stockton.
Crayon portrait	Joseph Goyette	Stockton.
Bird painting in oil	Mrs. G. A. Atherton	Stockton.
Portrait in water colors	Joseph Goyette	Stockton.
Silk flowers	Mrs. J. D. Utt	Stockton.
Native silkworms, and its products	Joseph Neumann	San Francisco.
Embroidered lace, imitation of old English lace	Miss L. F. Booker	Stockton.
Corsets and shoulder braces	Mrs. M. H. Ober	San Francisco.
Manicure goods and cosmetics	Mrs. M. H. Ober	San Francisco.
General display of school work	St. Mary's College	Stockton.
General display of school work	Public schools	San Joaquin Co.
Exhibit of Froebel kindergarten work	Mrs. C. W. Dohrman's kindergarten .....	.....
Exhibit of Froebel kindergarten work	Mrs. E. M. Tureman's kindergarten .....	.....

SPECIAL—BABY SHOW.

Children.	Parents.	Address.
CLASS I—TWINS.		
May and Creelia	M. and B. Clougherty	Stockton.
John and Eva	J. and Mrs. Hart	Stockton.
Hazel and Cecel	S. H. and T. Williams	Stockton.
Ada and Mary	W. and J. O'Connell	Stockton.
Lottie and John	Mr. and Mrs. J. McLean	Stockton.
CLASS II—UNDER SIX MONTHS OLD.		
Chester	J. N. and Mrs. Jones	Stockton.
Eva	C. Howell	Stockton.
James	Mr. and Mrs. Brown	Stockton.
Daniel	H. Petzinger	Stockton.
Carrie	Geo. J. Payne	Stockton.
Irene	H. C. Dortmund	Stockton.
Gertrude	H. B. Knight	Lathrop.
Emma Alger	P. N. Faber	Stockton.
Dan	W. R. Clark	Stockton.
Wilbur	D. C. Rhodes	Stockton.
Nettie	R. F. Rush	Stockton.
Reed	G. Cowie	Stockton.
Flora	F. R. Clark	Stockton.
Julia	G. Easton	Stockton.
Della	John Madden	Stockton.
Jessie	J. G. Sawyer	Stockton.
Leta	J. B. Duffy	Stockton.
Everett	H. C. Voss	Stockton.
Edward	J. H. Farwell	Stockton.
Charlie	C. Molen	Stockton.
Hilda	C. C. Blair	Stockton.
Henry	Martin Snyder	Stockton.
	C. E. Owen	Stockton.
CLASS III—BETWEEN SIX AND TWELVE MONTHS.		
Gladys	J. H. Swain	Stockton.
Francis	— Gillis	Stockton.
Olga	W. Bingham	Stockton.
Ricella	J. Gianelli	Stockton.
Alma	T. G. Pool	Stockton.
Gertrude	J. W. Simpson	Stockton.
Chesley	F. A. Severy	Stockton.
Alma May	J. H. Hyers	Stockton.
Truman	Alvin Swaine	Stockton.
Geneva	G. Blake	Stockton.
Frankie	W. H. Knowles	Stockton.
Owen	Louis C. Thom	Stockton.
Geo. Chester	G. C. Turner	Stockton.
Mamie	E. Byrnes	Stockton.
Mary L.	J. Morris	Stockton.
Hattie F.	G. and A. F. Ray	Stockton.
Louis H.	Joseph and A. Condy	Stockton.
CLASS IV—BETWEEN TWELVE AND EIGHTEEN MONTHS.		
Gustave	S. and G. H. Hess	Stockton.
Elva	Mr. and Mrs. S. Y. Strait	Stockton.
Belle G.	Mr. and Mrs. Arnest	Stockton.
Truth Eleanor	C. H. Moore	Stockton.
Clevy	J. W. Bell	Stockton.
Guy	Frank Ellis	Stockton.
Elnor	I. Chidester	Stockton.
Christine	Gus. Gerlach	Stockton.
Willie	Andrew Bristol	Stockton.
Howard	D. J. Fitzgerald	Stockton.
Rose	J. H. Gennit	Stockton.
Ivy	Mrs. M. B. Tamm	Stockton.
Owen L.	J. G. Maisel	Stockton.
Walter	W. B. Snow	Stockton.

SPECIAL—BABY SHOW—Continued.

Children.	Parent.	Address.
Frances	C. Sullivan	Stockton.
Eda	H. Mitchell	Stockton.
Frankie	F. D. Gianelli	Stockton.
Nellie	L. H. Evans	Stockton.
Beatrice	P. Tobin	Stockton.
Mabel A.	H. F. Pusey	Stockton.
Florence I.	Mr. and Mrs. Davis	Stockton.

SECOND SPECIAL BABY SHOW.

Children.	Parent.	Address.
CLASS I—UNDER SIX MONTHS OLD.		
Chester C. Nelson		Stockton.
Fannie R. Sturcke		Stockton.
James Brown		Stockton.
Charlie Blair		Stockton.
Daniel Rhoads		Stockton.
Jessie Duffy		Stockton.
CLASS II—BETWEEN SIX AND TWELVE MONTHS.		
Hattie F. Ray		Stockton.
Nelson Cowden		Stockton.
Rosa Day		Stockton.
Rochele Gianelli		Stockton.
Ida Frances Driselom		Stockton.
Alma Hyers		Stockton.
Royal Howe Morly		Stockton.
Freda Tschereschky		Stockton.
Edna Young		Stockton.
CLASS III—BETWEEN TWELVE AND EIGHTEEN MONTHS.		
Maude Douglass		Stockton.
Christiana Gerlach		Stockton.
Eleanor Chidister		Stockton.
Franz Ludwig		Stockton.
Ida May Abbott		Stockton.
Raymond Morey		Stockton.
Mabel A. Pusey		Stockton.
Homer Leroy Wiseman		Stockton.
George C. Turner		Stockton.
Frances Mabel Wells		Stockton.

CURIOSITY SHOP.

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Doll, by Nellie Debnam. 2. Spinning wheel, by Mrs. Jessie Lewis. Brought across the plains in 1852. 3. Andiron, by Mrs. John Reid. 4. Old fashion bedstead, by Mrs. Dudley. 5. Old fashion cradle, by Mrs. Aimes. 6. Family tree, by Mrs. Wilkes. 7. Spinning wheel, by Mrs. L. B. Holt. 8. Old fashion cap, by Miss Nellie Heck. 9. Old silk dress, by Mrs. C. A. Ruggles. 10. Block of wood from Sutter's Mill, by Mrs. J. W. Hart. 11. Candlestick, 100 years old, brought from London, by Mrs. J. W. Hart. 12. Book, 173 years old, published in London, by Mrs. J. W. Hart. | <ol style="list-style-type: none"> 13. Hymn book, 84 years old, by Mrs. J. W. Hart. 14. Tarantula's nest, by Mrs. Hart. 15. Bottle of agates, from Emerald Bay, Lake Tahoe, by Mrs. J. W. Hart. 16. Relics of the Lodi fire, by Mrs. J. W. Hart. 17. Work box, 75 years old, by Mrs. J. W. Hart. 18. Prayer and psalm book, 65 years old, by Mrs. J. W. Hart. 19. Apron embroidered by hand by Mrs. Hart 35 years ago. 20. Pitcher, 103 years old, brought from London, by Mrs. J. W. Hart. 21. Old fashion clock, sent from Michigan. |
|--|---|

CURIOSITY SHOP—Continued.

It is about 118 years old; has buckets of sand for weights, by Mrs. J. W. Hart.

22. Silk wedding stockings and gloves, 51 years old, knitted by Mrs. Lucy Valentine Hathaway, in Massachusetts, by Mrs. L. V. Pierce.

23. Long black lace veil, 60 years old, all hand made, by L. V. Pierce.

24. White lace neckkerchief, 50 years old, hand made, by Lucy V. Pierce.

25. Beaded reticule, 71 years old, made by Mrs. Lucy Valentine Hathaway, Freetown, Mass.; made in 1817; displayed by Mrs. L. V. Pierce.

26. Old church anthem book, 99 years old; property of Mrs. James M. Pierce, of San Francisco.

27. Linen shirt worn by Arthur Knight at three months of age.

28. Shoes worn by the same boy at 9 months of age.

29. Bottle containing a miniature ship, made by a disabled soldier, and presented to H. B. Gilbert by H. P. Hayes, of the Soldiers' Home, Ohio.

30. Doll's knitted dress over 100 years old, by Captain Geo. Fake, Banta.

31. Japanese teapot, by Captain Geo. Fake.

32. Chinese slippers, by Captain Geo. Fake.

33. Chinese gentleman's slippers, by Captain Geo. Fake.

34. Emu egg, by Captain Geo. Fake.

35. Chinese compass, by Captain Geo. Fake.

36. Petrified wood, by Captain Geo. Fake.

37. Specimens of copper, by Captain Geo. Fake.

38. Japanese toothbrush, by Captain Geo. Fake.

39. Japanese dress goods, by Captain Geo. Fake.

40. Agate rock, by Captain Geo. Fake.

41. Agate egg, by Captain Geo. Fake.

42. Chinese images, by Captain Geo. Fake.

43. Salt rock, by Captain Geo. Fake.

44. Piece of rock from a desert, by Captain Geo. Fake.

45. Specimens of silver ore, by Captain Geo. Fake.

46. Specimens of copper ore, by Captain Geo. Fake.

47. Royal family in China, by Captain Geo. Fake.

48. Chinese priests, by Captain Geo. Fake.

49. Chinese lady, by Captain Geo. Fake.

50. Chinese lady's bedroom, by Captain Geo. Fake.

51. Chinese lady's carriage, by Captain Geo. Fake.

52. Street costumes in China, by Captain Geo. Fake.

53. Chinese carrying their babies, by Captain Geo. Fake.

54. Chinese game, by Captain Geo. Fake.

55. Chinese actresses, by Captain Geo. Fake.

56. Chinese image, by Captain Geo. Fake.

57. Chinese washing, by Captain Geo. Fake.

58 to 66. Scenes from Peru, by Captain Geo. Fake.

67. Specimens of silver ore, by Captain Geo. Fake.

68. Pewter platter, 100 years old, by Mrs. Jos. Adams.

69. Sugar bowl, brought over in the Mayflower, by Mrs. Jos. Adams.

70. "Maryland Journal," published in 1773, by Mrs. Jos. Adams.

71. Quilt from Sandwich Islands, by Captain Geo. Fake.

72. Bow and arrow, by Captain Geo. Fake.

73. German cap, 80 years old, by Mrs. Kettleman, of Lodi.

74. Towel woven by hand, by Mrs. Jos. Adams.

75. Turning wreath, made by a sailor with a penknife, by Mrs. Kettleman.

76. Wooden candlestick, made by a sailor with a penknife, by Mrs. Kettleman.

77. Windlass, made by the same person, by Mrs. Kettleman.

78. China tea cup and saucer, 100 years old, by Mrs. Kettleman.

79. China cup and saucer, 100 years old, by Mrs. Kettleman.

80. German wedding shawls, 66 years old, by Mrs. Kettleman.

81. Sewing machine, by Mrs. Kettleman.

82. Watch, by Mrs. C. O. Ivory, Lodi.

83. Shark's teeth, by Mrs. C. O. Ivory.

84. Walrus tooth, by Mrs. C. O. Ivory.

85. Fungus from W. T., by Mrs. C. O. Ivory.

86. Sealskin boot, made by natives of Arctic, by Mrs. C. O. Ivory.

87. Drinking cup used by natives of Central America, by Mrs. C. O. Ivory.

89. Whale tooth, by Mrs. C. O. Ivory.

90. Vegetable ivory, by Mrs. C. O. Ivory.

91. Sperm whale tooth, by Mrs. C. O. Ivory.

92. Bellows, 100 years old, by Mrs. C. O. Ivory.

93. Long coral, by Mrs. C. O. Ivory.

94. Bomb lance used by whalers, by Mrs. C. O. Ivory.

95. Bale of cotton, by Mrs. C. O. Ivory.

96. Flax brought from Ireland in 1760, by Mrs. C. O. Ivory.

97. Vase cut from the tooth of the sperm whale with a pocket knife, by Mrs. C. O. Ivory.

98. Indian money, by Mrs. C. O. Ivory.

99. Ivory napkin ring, 120 years old, by Mrs. C. O. Ivory.

100. Indian arrow head from Mendocino County, by Mrs. C. O. Ivory.

101. Handkerchief worn by Alex. Harper, Pennsylvania, 1770, by Mrs. H. O. Ivory.

102. Silk handkerchief, 1815, by Mrs. C. O. Ivory.

103. Baby dress, by Mrs. C. O. Ivory.

104. Two caps, by Mrs. C. O. Ivory.

105. Shell, by Mrs. C. O. Ivory.

106. Oyster shells, ten pounds in weight, by H. G. Learned.

107. Rattlesnake preserved in alcohol, by H. G. Learned.

108. Two specimens of quartz, by H. G. Learned.

109. Two clam shells from near Fresno, by H. G. Learned.

110. Various specimens, by H. G. Learned.

111. Display of birds' eggs, insects, butterflies, shells, flower garden seeds, etc., by H. G. Learned.

112. Portraits, over 100 years old, by Mrs. L. B. Holt.

113. Cow's horn, by Mrs. L. B. Holt.
114. Star fish, by Mrs. L. B. Holt.
115. Petrified shell, by Mrs. L. B. Holt.
116. Petrified egg found near Santa Cruz, by Mrs. L. B. Holt.
117. Bark from Calaveras big tree, by Mrs. L. B. Holt.
118. Churchill, by Mrs. L. B. Holt.
119. Gladstone, by Mrs. L. B. Holt.
120. Petrified seaweed, by Mrs. L. B. Holt.
121. Silver soup ladle, by Mrs. L. B. Holt.
122. Silver gravy spoon, by Mrs. L. B. Holt.
123. Four teaspoons, 72 years old, by Mrs. L. B. Holt.
124. Three tablespoons, 50 years old, by Mrs. L. B. Holt.
125. Hymn book, 86 years old, by Mrs. L. B. Holt.
126. Irish priest, Captain Fake.
127. Petrified human eye, Captain Fake.
128. Chinese boat, Captain Fake.
129. Coins, Captain Fake.
130. Seal skin boots, Captain Wing.
131. Carved seal, Captain Wing.
132. Glass cane, 100 years old, J. Q. Nutter.
133. Old German pipe, 50 years old, H. Walters.
134. Hunting pipe, John Dreyer.
135. Indian doll, Miss Nellie Littlehale.
136. Indian necklaces, Miss Nellie Littlehale.
137. Steer's horns, L. Gerlach.
138. Reticule, 50 years old, Mrs. E. M. Stowe.
139. Wedding collar worn 70 years ago, Mrs. E. M. Stowe.
140. Saucer and spoons, 75 years old, Mrs. E. M. Stowe.
141. Chenille work done in 1800, Mrs. E. M. Stowe.
143. Home-made linen pillow cases, 1818, Mrs. E. M. Stowe.
144. Moss rock, from the Natural Bridge, Calaveras County, Mrs. J. W. Hart.
145. Specimens of slag from Oregon Iron Works, color depending on degree of temperature, Mrs. J. W. Hart.
146. Petrified wood, Mrs. J. W. Hart.
147. Specimen of silver ore from Cordalene Mine, Mrs. J. W. Hart.
148. Linen sheet, woven about 1800, Mrs. J. L. Beecher.
149. Valence, Mrs. J. L. Beecher.
150. Sweet potato, Mrs. J. L. Beecher.
151. Bedquilt containing twenty thousand pieces, made by Mrs. L. M. Earle, Amador County, Mrs. J. L. Beecher.
152. Saucer 75 years old, Mrs. J. L. Beecher.
153. Gun 150 years old, W. H. Van Vlear.
154. Two guns 50 years old, W. H. Van Vlear.
155. Silver pitcher, over 100 years old, Mrs. W. Stockwell.
156. Memorandum book written in the Russian language, 1886, Miss Nellie Heck.
157. Quartz frame, Miss Nellie Heck.
158. Child's gold bracelets, Miss Nellie Heck.
159. Siberian picture, Miss Nellie Heck.
- 160-162. Chinese shawls, Mrs. L. Bassilio.
163. Sampler, Mrs. Derrick.
164. Box made of curled maple in 1826, Mrs. Derrick.
165. Bedspread 65 years old, made by Mrs. Edward Spooner, of Fairhaven, Mass., Mrs. A. Spooner.
166. Embroidered vest 65 years old, Mrs. A. Spooner.
167. Linen shirt, home-made, 150 years old, Mrs. A. Spooner.
168. Pillow case, home-made, Mrs. A. Spooner.
169. Two chairs which were brought from England in the ship Ann, in 1623.
170. Chair belonging to a set of furniture which Washington had in his camp at Cambridge, Mass., in 1776; said furniture then belonging to Samuel Eliot, of Boston, Mrs. A. Spooner.
171. Note book of music and song, over 100 years old, Mrs. A. Spooner.
172. Family Bible, printed in 1806, Mrs. A. Spooner.
173. Old copy of Milton's Paradise Lost, Mrs. A. Spooner.
174. Bone spoon, Mrs. Jory.
175. Pair of bracelets, Mrs. Jory.
176. Shawl, Madeline Cabezut.
177. Jewelry, Mrs. H. M. Fanning.
178. Pair of spoons from China, J. D. Fanning.
179. Apron made in St. Petersburg by a child 10 years old, J. D. Fanning.
180. Large doll, Clara Washington.
181. Mug, 63 years old, Mrs. A. Spooner.
182. Plate, 150 years old, Mrs. A. Spooner.
183. Plate, 60 years old, Mrs. A. Spooner.
184. Cup and saucer, 150 years old, Mrs. A. Spooner.
185. Indian dagger, Mrs. A. Spooner.
186. Winkle shells and spawn, Mrs. A. Spooner.
187. Small pitcher, 100 years old, Mrs. L. B. Holt.
188. Glass sugar bowl, Susanna Ogglesby.
189. Small basket, Susanna Ogglesby.
190. Sampler, Susanna Ogglesby.
191. Raw flax, raised in New York; flax thread, W. H. Derrick.
192. Cap, worked in 1831, W. H. Derrick.
193. Pair of snufflers and tray, W. H. Derrick.
194. Kettle, brought across the plains in 1850, W. H. Derrick.
195. Wine glass over 400 years old; it has been used by King Richard III., E. R. Hedges.
196. Cup and saucer brought from England, from 250 to 300 years old, E. R. Hedges.
197. Pitcher brought from England in 1630 by Thomas Richards, ancestor of E. R. Hedges.
198. Shawl brought from England in 1630, E. R. Hedges.
199. Shawl, E. R. Hedges.
200. Towels, made by hand by grandmother of E. R. Hedges.
201. Lace veil brought from England in 1630, E. R. Hedges.
202. Butcher belt, F. Sievers.
203. Sampler, worked in 1845, Mrs. ———.
204. String of beads, 75 years old, Mrs. ———.
205. Silk handkerchief, worn 45 years ago, Mrs. ———.

CURIOSITY SHOP—Continued.

206. Book of Scotch poems, published in 1805, D. Tummely.
207. Lace collar, about 80 years old, Mrs. Pennell.
208. Piece of German linen, 106 years old, Mrs. Pennell.
209. Sleeve of a dress, 93 years old, Mrs. Pennell.
210. Chair, 41 years old, Mrs. C. J. Smith.
211. Chair, 104 years old, Mrs. C. J. Smith.
212. Table, Mrs. C. J. Smith.
213. Rustic chairs, G. L. Hushberger.
214. Silk shawl, Mrs. Bassilio.
215. Flag presented to Company "A," Third Infantry, General Ketchum.
216. Fifty-dollar post note, issued in 1840, during President Van Buren's administration, General Ketchum.
217. Brass candlesticks, Mrs. E. B. Stowe.
218. Indian earrings, Mrs. E. B. Stowe.
219. Pair of moccasins, Mrs. E. B. Stowe.
220. Piece of turf, used for fuel in Ireland, Mrs. W. O. Robinson.
221. Baby dress, 54 years old, Mrs. S. H. Fickett.
222. Oil portraits, 50 years old, Mrs. S. H. Fickett.
224. Sampler, worked in 1804, Mrs. W. L. Overhiser.
225. Sampler, Mrs. W. L. Overhiser.
226. Gold pin and buckle, Mrs. W. L. Overhiser.
227. Pin and buckle, 60 years old, Mrs. W. L. Overhiser.
228. Beaded hand-bag, Mrs. W. L. Overhiser.
229. Old lady's bonnet, Mrs. W. L. Overhiser.
230. Old lady's hood, Mrs. W. L. Overhiser.
231. Copy of Boston "Gazette," published in 1770, A. C. Oullahan.
232. Saber, Mrs. C. H. Gordon.
233. Sash, Mrs. C. H. Gordon.
234. Pair of snuffers and tray, 103 years old, Mrs. Clifford.
235. Snuff box, over 100 years old, Mrs. Clifford.
236. Mantel ornament, 103 years old, Mrs. Clifford.
237. Pebble trunk, made by M. N. Dunlap, aged 75 years, Mrs. L. A. Roundtree.
238. Silver spoons, 100 years old, Mrs. P. S. Wilkes.
239. Salt spoon, 100 years old, Mrs. P. S. Wilkes.
240. Silver buttons, 60 years old, Mrs. P. S. Wilkes.
242. Basket, made from a dagger tree grown on Island of Jamaica, Mrs. H. M. La Rue.
243. Wall pocket, made from same tree, Mrs. H. M. La Rue.
244. Lace bark of a tree from Jamaica Island, Mrs. H. M. La Rue.
245. Indian cup, Mrs. H. M. La Rue.
246. Indian cup, Mrs. H. M. La Rue.
247. Mask, Indian work, Mrs. H. M. La Rue.
248. Cocoanuts from Jamaica Island, Mrs. H. M. La Rue.
249. Box of Guinea corn, Mrs. H. M. La Rue.
250. Licorice wood bean, Mrs. H. M. La Rue.
251. Snail shell, Mrs. H. M. La Rue.
252. Cotton, from cottonwood tree from Jamaica Island, Mrs. H. M. La Rue.
253. Soldier shells, Mrs. H. M. La Rue.
254. Frames made from banana leaves, Mrs. H. M. La Rue.
255. Lichen, from Island of Jamaica, Mrs. H. M. La Rue.
256. Sugar bowl, bought in 1776, Mrs. N. E. Alling.
257. Gray squirrel, Dr. Davenport.
258. Red squirrel, Dr. Davenport.
259. Wildcat, Dr. Davenport.
260. Owl, Dr. Davenport.
261. Hawk, Dr. Davenport.
262. Buzzard, Dr. Davenport.
263. Owl, Dr. Davenport.
264. Back-bone of a shark, N. D. Gifford.
265. Cup and saucer, over 100 years old, Mrs. J. M. McCall.

PREMIUMS AWARDED—1888.

FIRST DEPARTMENT.

PARK.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I—THOROUGHBREDS—STALLIONS.			
Fred Archer, four years old	Colonel C. Dorsey	Oakdale	\$25 00
Rackety Jack, six years old	James McAfee	Stockton	\$8 00
March Wind, two years old	Colonel C. Dorsey	Oakdale	\$15 00
Suckling	L. U. Shippee	Stockton	\$3 00
MARES.			
Rachel, four years old	W. R. Ruggles	Stockton	\$15 00
Stella S, two years old	L. U. Shippee	Stockton	\$10 00
Salfarara, two years old	L. U. Shippee	Stockton	\$4 00
Suckling filly	L. U. Shippee	Stockton	\$2 00
CLASS II—ROADSTERS—STALLIONS.			
Hawthorne, nine years old	L. U. Shippee	Stockton	\$25 00
Mount Vernon, seven years old	J. A. McCloud	Stockton	\$8 00
Echo, Jr., three years old	S. Hewlett	Stockton	\$15 00
Harry N, two years old	N. Nevin	Stockton	\$10 00
Nutgrove, two years old	Ed. Topham	Milpitas	\$3 00
—, one year old	W. A. French	Stockton	\$7 50
George S, one year old	G. W. Sampson	French Camp	\$2 50
MARES AND GELDINGS.			
Palladin, four years old or over	L. U. Shippee	Stockton	\$15 00
Bohemian Girl, four years old or over	R. E. Stowe	Stockton	\$5 00
Carrie Vernon, three years old	J. A. McCloud	Stockton	\$10 00
Flash, three years old	W. F. Jordan	Stockton	\$3 00
Dewdrop, two years old	W. F. Jordan	Stockton	\$7 50
Kitty Vernon, two years old	George W. French	Stockton	\$2 50
YEARLING FILLIES.			
Lorina	B. E. Harris	San Francisco	\$5 00
Oasis	Mrs. Lucy P. Goff	Stockton	\$2 00
SPAN OF MATCHED ROADSTERS.			
George and Lady Washington	Sargent Bros.	Lodi	\$20 00
Lady and Mollie	J. F. Visser	Stockton	\$7 00
TROTTING SUCKLING COLTS.			
Brentwood	B. E. Harris	San Francisco	\$4 00
Pilot	L. U. Shippee	Stockton	\$2 00
TROTTING SUCKLING FILLIES.			
Roxey	L. U. Shippee	Stockton	\$4 00
Blondy	W. A. French	Stockton	\$2 00
CLASS III—HORSES FOR ALL PURPOSES—STALLIONS.			
B D I, three years old	W. S. Alexander	Stockton	\$12 50
Davy Crockett, three years old or over	W. F. Smith	Farmington	\$12 50
Wreckman, three years old or over	J. Boyce	Lockeford	\$8 00
Johnny Vernon, two years old	Alex. Gross	Stockton	\$15 00
Prince, two years old	F. B. Haslam	Stockton	
MARES.			
Mollie, six years old	William Thomas	Douglas Flat	\$10 00
Sweetwood, three years old or over	B. E. Harris	San Francisco	\$4 00
Flora, six years old	N. Nevin	Stockton	\$10 00
Victoria, two years old	William Thomas	Douglas Flat	Sub.to In.

FIRST DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
STALLIONS—OTHER THAN THOROUGHBREDS.			
Mt. Vernon and ten colts	J. A. McCloud	Stockton .....	.....
MARES.			
Brown Tempest and four colts	L. U. Shippee	Stockton .....	.....
CLASS IV—DRAFT HORSES—STALLIONS.			
Paris, six years old	Nicewonger & Ellenwood	Ripon	\$25 00
Sir Francis, three years old	E. P. Allison	Lodi	\$8 00
Wastely, two years old	J. M. Ritchie	Grayson	\$15 00
Len Smith, four years old	N. Nevin	Stockton	Sp. prem.
MARES.			
Madame, two years old or over	W. B. Ellenwood	Atlanta	\$10 00
CLASS V—CARRIAGE ANIMALS.			
Amy H, four years old	S. Hewlett	Stockton	\$7 50
CLASS VI—SPANS OF MULES.			
Jude and Puss	T. J. Pope	Stockton	\$15 00
Ned and Quinn	T. J. Pope	Stockton	\$5 00
CLASS VII—JACKS AND JENNIES.			
Bruce, jack, three years old	I. R. Mickey	Stockton	\$25 00
Washington Eclipse, Jr., jack, two years old	Levi Carter	Ceres	\$15 00
Goliah, suckling jack	L. U. Shippee	Stockton	\$3 00
Lumix, jenny, six years old	L. U. Shippee	Stockton	\$15 00
Bird, jenny, five years old	L. U. Shippee	Stockton	\$5 00
Julia, jenny, two years old	L. U. Shippee	Stockton	\$10 00
Maude, jenny, one year old	L. U. Shippee	Stockton	\$7 50
Annie, suckling jenny	L. U. Shippee	Stockton	\$2 00
CLASS VIII—DURHAMS—BULLS.			
3d Kirklevington of Forest Home, three years old or over	C. Younger & Son	San José	\$20 00
26th Kirklevington, two years old	C. Younger & Son	San José	\$15 00
Hightower, two years old	C. A. Stowe	Stockton	\$5 00
Napoleon, one year old	E. S. Beecher	Stockton	\$9 00
43d Kirklevington, bull calf	C. Younger & Son	San José	\$3 00
COWS.			
4th Belle of Forest Home, three years old or over	C. Younger & Son	San José	\$15 00
4th Jessie Maynard, two years old	C. Younger & Son	San José	\$10 00
11th Oxford Rose, one year old	C. Younger & Son	San José	\$7 50
12th Oxford Rose, heifer calf	C. Younger & Son	San José	\$2 00
CLASS X—JERSEYS—BULLS.			
Waterman, three years old or over	H. S. Sargent	Stockton	\$10 00
Earl Mameluke, three years old or over	Levi Carter	Ceres	\$6 00
Maud's Olaf, two years old	Thomas Ward	Oakland	\$10 00
Silver King, one year old	Thomas Ward	Oakland	\$9 00
Aloha S, bull calf	H. S. Sargent	Stockton	\$3 00
COWS.			
Lady Maud, three years old or over	Thomas Ward	Oakland	\$15 00
Daisy W, three years old or over	H. S. Sargent	Stockton	\$5 00
Amy Platt, two years old	H. S. Sargent	Stockton	\$10 00
Anita, two years old	Thomas Ward	Oakland	\$3 00
Modjeska, one year old	H. S. Sargent	Stockton	\$7 50
Oakland Queen, one year old	Thomas Ward	Oakland	\$2 50
CLASS XI—HOLSTEINS—BULLS.			
Pio Pico, three years old or over	Dr. W. H. Mays	Stockton	\$20 00
El Cuervo of Netherland, two years old	F. H. Burke	Menlo Park	\$15 00
King of Menlo, one year old	F. H. Burke	Menlo Park	\$9 00
Stockton, bull calf	W. F. Sibley	Stockton	\$3 00

FIRST DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
COWS.			
Sylpha, three years old or over	F. H. Burke	Menlo Park	\$15 00
Duchess of Oak Grove, three years old or over	Dr. W. H. Mays	Stockton	\$5 00
Onterette, two years old	F. H. Burke	Menlo Park	
Belanga, one year old	F. H. Burke	Menlo Park	\$7 50
CLASS XIII—HERDS OF CATTLE.			
Durham herd	C. Younger & Son	San José	\$20 00
Holstein herd	F. H. Burke	Menlo Park	\$20 00
Jersey herd	H. S. Sargent	Stockton	\$20 00
CLASS XV—SHEEP.			
Cotswold ram	C. Younger & Son	San José	\$10 00
Pen of Cotswold ewes, not less than five.	C. Younger & Son	San José	\$7 50
CLASS XVI—ESSEX AND BERKSHIRE SWINE.			
Essex boar, four months old	W. A. French	Stockton	\$10 00
Berkshire boar	L. U. Shippee	Stockton	\$10 00
Essex sow, four months old	W. A. French	Stockton	\$9 00
Berkshire sow	L. U. Shippee	Stockton	\$9 00
Berkshire sow	W. A. French	Stockton	\$3 00
Berkshire sow, and four pigs	L. U. Shippee	Stockton	\$10 00
CLASS XVII—POULTRY.			
Pair of Plymouth Rocks	L. U. Shippee	Stockton	\$2 50
Pair of Leghorns	W. A. French	Stockton	\$2 50
Pair of Leghorns	T. Ward	Oakland	\$1 25
Pair of Bantams	W. J. Hickox	Stockton	\$2 50
Pair of Rouen ducks	F. H. Burke	Menlo Park	\$2 50
Pair of Pekin ducks	F. H. Burke	Menlo Park	\$2 50
Pair of geese, Toulouse	F. H. Burke	Menlo Park	\$2 50
Trio of turkeys	W. A. French	Stockton	\$3 00

THIRD DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASSES I AND II.			
Best header	Matteson & Williamson	Stockton	\$10 00
Lightning hay press	S. C. H. & A. Works	Stockton	\$5 00
Combined clod crusher, harrow, pulverizer, and leveler	Weinstock & Lubin	Sacramento	
Roller seed sower and harrow combined	Matteson & Williamson	Stockton	Sp. men.
Combined seed sower, harrow, roller, and leveler	Octave Granville	Stockton	Diploma.

LADIES' EQUESTRIANISM.

Premium.	Rider.	Address.	Award.
First premium	Miss A. E. Smith	Stockton	\$25 00
Second premium	Frankie Cowell (11 years of age)	Stockton	\$15 00
Third premium	Edith Bailey	Stockton	\$10 00

SECOND DEPARTMENT.

PAVILION.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I—FARM PRODUCTS RAISED IN DISTRICT NO. II.			
Best six varieties of wheat, one hundred pounds each	J. D. Huffman	Lodi	\$10 00
Best three varieties of barley, one hundred pounds each	J. D. Huffman	Lodi	\$10 00
Best fifty pounds of rye	J. D. Huffman	Lodi	\$10 00
CULTIVATED NUTS.			
Best five pounds of English walnuts	Mrs. W. B. West	Stockton	\$2 00
Best five pounds of softshell almonds	Mrs. Joseph Hale	Stockton	\$2 00
CLASS II—VEGETABLES.			
Best and largest variety of vegetables raised on one ranch, and exhibited by the producer	L. U. Shippee	Stockton	\$10 00
Second best and largest variety vegetables raised on one ranch and exhibited by the producer	Mrs. C. C. Castle	Stockton	Sub. to
Best and largest exhibit of vegetables, fruit, etc., by one person	L. U. Shippee	Stockton	Indep't. \$10 00
CLASS III—GRAINS AND GRASSES.			
Best thirty bundles of grain of not less than seven varieties, each ten inches thick at the band; straw not less than two feet long	J. D. Huffman	Lodi	\$25 00
For the most artistically arranged display of grain, as above, special premium	J. D. Huffman	Lodi	\$10 00
For the most artistically arranged display of California grasses	J. D. Huffman	Lodi	\$10 00
CLASS V—HORTICULTURAL DEPARTMENT.			
Largest and best collection of apples	J. Putnam	Clements	\$10 00
Second largest and best collection of apples	L. U. Shippee	Stockton	\$4 00
Best five varieties of apples	L. U. Shippee	Stockton	Am. Agri.
Largest and best collection of pears	J. Putnam	Clements	\$8 00
Second largest and best collection of pears	L. U. Shippee	Stockton	\$3 00
Best five varieties of pears, five each	L. U. Shippee	Stockton	\$3 00
Best three varieties of pears, five each	L. U. Shippee	Stockton	Am. Agri.
Largest and best collection of peaches	J. Putnam	Clements	\$5 00
Second best collection of peaches	L. U. Shippee	Stockton	\$2 00
Best twelve peaches of any variety	L. U. Shippee	Stockton	\$2 00
Largest and best collection of nectarines	L. U. Shippee	Stockton	\$3 00
Best twelve specimens of quinces	L. U. Shippee	Stockton	\$3 00
Second best twelve specimens of quinces	Mrs. Jos. Hale	Stockton	Am. Agri.
Best collection of pomegranates	Mrs. G. S. Allard	Stockton	\$3 00
Best collection of apricots	L. U. Shippee	Stockton	\$3 00
Best collection of plums, named varieties, six of each	L. U. Shippee	Stockton	\$3 00
Best twelve plums of any variety	L. U. Shippee	Stockton	\$2 00
Best collection of prunes	L. U. Shippee	Stockton	\$3 00
Best display of oranges	L. U. Shippee	Stockton	\$3 00
Best collection of grapes	Frank West	Stockton	\$10 00
Second best collection of grapes	J. Putnam	Clements	\$5 00
Best five varieties of grapes	T. J. Stephens	Stockton	\$3 00
Second best five varieties of grapes	L. U. Shippee	Stockton	Am. Agri.
Best single variety of grapes	Ada Learned	Stockton	\$3 00
Best eight bunches of raisin grapes	Ada Learned	Stockton	\$5 00
Best collection of figs	Allan Reid	Stockton	\$3 00
Second best collection of figs	L. U. Shippee	Stockton	\$1 50
Best six specimens of figs	L. U. Shippee	Stockton	\$2 00
Best exhibit of olives	L. U. Shippee	Stockton	\$3 00
Largest and best exhibit of fruit	J. D. Huffman	Lodi	\$20 00
Second largest and best exhibit of fruit	J. Putnam	Clements	\$6 00
Largest and best exhibit of fruit in the district by one person	L. U. Shippee	Stockton	\$15 00

SECOND DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS V—DRIED FRUIT.			
Best box of prunes	T. J. Stephens	Stockton	\$3 00
Second best box of prunes	Mrs. J. Hale	Stockton	\$1 00
Best box of raisins	Mrs. J. Hale	Stockton	\$3 00
Best box of figs	Mrs. J. Hale	Stockton	\$3 00
Second best box of figs	T. J. Stephens	Stockton	\$1 50
Best box of plums	T. J. Stephens	Stockton	\$2 00
Best box of peaches	T. J. Stephens	Stockton	\$2 00
Best box of pears	T. J. Stephens	Stockton	\$2 00
Best box of apricots	Mrs. J. Hale	Stockton	\$2 00
Best box of nectarines	T. J. Stephens	Stockton	\$2 00
FRUIT IN JARS.			
Best exhibit of fruit preserved in spirits	Mrs. J. C. Reid	Stockton	\$5 00
Second best exhibit of fruit preserved in spirits	Mrs. J. Hale	Stockton	\$2 00
Best exhibit of fruit preserved in sugar	Mrs. J. Hale	Stockton	\$10 00
Second best exhibit of fruit preserved in sugar	Mrs. J. C. Reid	Stockton	\$4 00
JELLIES.			
Best exhibit of jellies	Mrs. J. C. Reid	Stockton	\$7 50
Second best exhibit of jellies	Mrs. J. Hale	Stockton	\$2 50
CANNED FRUITS.			
Best canned fruit	Mrs. J. Hale	Stockton	\$10 00
Best assortment of pickles of all kinds	Mrs. J. Hale	Stockton	\$5 00
For cucumber pickles	Mrs. J. C. Reid	Stockton	Sp. men.
Best assortment of crystallized fruit	Mrs. J. Hale	Stockton	\$5 00
Best assortment of tomato catsup	Mrs. J. Hale	Stockton	\$3 00
CLASS VI—HOME WORK.			
Best cheese, thirty pounds or more	J. M. Bigger	Stockton	\$7 50
CLASS VII—FLORAL.			
Best collection of flowering plants in bloom	Mrs. R. S. Bates	Stockton	\$5 00
Best collection of ornamental foliage plants	Mrs. R. S. Bates	Stockton	\$2 00
Best collection of new and rare plants	Mrs. R. S. Bates	Stockton	\$2 00
Best display of cut flowers	Mrs. R. S. Bates	Stockton	\$3 00
Best display of bouquets	Mrs. R. S. Bates	Stockton	\$2 00
Best display of plants for greenhouse, conservatory, and window culture	Mrs. R. S. Bates	Stockton	\$2 00
Best display of hanging baskets containing plants	Mrs. R. S. Bates	Stockton	\$2 00
Best display of ornamental grasses	Mrs. R. S. Bates	Stockton	\$2 00
Best display of single floral piece	Mrs. B. Harrison	Stockton	\$3 00
CULINARY.			
Best steamed brown bread	Mrs. J. Hale	Stockton	\$2 00
Best white bread	Mrs. Ed. Byrnes	Stockton	\$2 00
Second best white bread	Mrs. J. C. Reid	Stockton	\$1 00
Best graham bread	Mrs. J. Hale	Stockton	\$2 00
Best gingerbread	Mrs. J. Hale	Stockton	\$1 50
Best corn bread	Mrs. J. C. Reid	Stockton	\$2 50
Best plate of biscuit	Mrs. H. E. Williamson	Stockton	\$2 00
Best fruit cake	Mrs. J. Hale	Stockton	\$3 00
Best pound cake	Mrs. H. E. Williamson	Stockton	\$3 00
Best sponge cake	Mrs. L. C. Thom	Stockton	\$2 50
Best jelly cake	Mrs. Ed. Byrnes	Stockton	\$1 50
Best chocolate cake	Mrs. J. C. Reid	Stockton	\$1 50
Best nut cake	Mrs. J. C. Reid	Stockton	\$0 75
Best cocoanut cake	Mrs. Jos. Hale	Stockton	\$0 75
Best angel cake	Mrs. H. E. Williamson	Stockton	\$1 50
Best doughnuts	Mrs. L. C. Thom	Stockton	\$1 50
	Miss K. T. Kelly	Stockton	\$1 50

DISPLAY FROM PLACER COUNTY.

A large display of peaches and pears, so far as Nevada and Placer Counties are concerned, equal; both good. Exhibit of olives from Placer County being superior, as also the variety of nuts, lemons, and oranges. In fact, all the fruit from Placer, including apples, grapes, prunes, crabapples, and Japanese persimmons, is of superior quality.

DISPLAY FROM NEVADA COUNTY.

A large display of apples and peaches. All fruit from this county is of very superior quality. The exhibit of vegetables, consisting of Irish potatoes, sweet potatoes, yams, and squashes, is very creditable, though not large. A fine display of nuts. One noticeable fruit was a plum propagated from the wild plum; four removes has produced a large, fine flavored, handsome fruit. One squash in this display weighs one hundred and fifty pounds. Two boxes of fine peaches were brought from Mr. Nickerson's private orchard.

The display of vegetables from the stock farm of A. Chebt, Sunol, Alameda County, consists principally of four monster squashes, weighing from one hundred and sixty to one hundred and ninety pounds each; total weight of the four squashes, seven hundred pounds.

DISPLAY FROM COLUSA COUNTY.

Splendid specimens of melons, weighing from sixty to seventy pounds each; fine specimen of white and Indian corn; also, broom corn of finest quality, twenty-two inches in length. Fine squash weighing one hundred and thirty pounds from the ranch of Hon. John Boggs.

DISPLAY FROM AMADOR COUNTY.

Peculiar and fine, consisting of peaches, apples, papaws, nuts (large variety), black walnuts of enormous size (being eight inches in circumference), hazel nuts, etc., persimmons, for which we would recommend a special premium.

D. A. Learned, Stockton, exhibits an excellent and varied display of grapes, both table and raisin; also, a fine assortment of quinces, peaches, oranges, Japanese persimmons, black walnuts, pecans, chestnuts, pomegranates, seedling peaches, etc.

Thomas E. Ketchum's collection of pomegranates is deserving of special mention, as the specimens are very fine.

THIRD DEPARTMENT.

Article Exhibited.	Exhibitor	Address.	Award.
CLASS I—MACHINERY, IMPLEMENTS, ETC.			
Best wheat drill	Truman, Hooker & Co.	San Francisco	\$3 00
Best mowing machine	H. C. Shaw	Stockton	\$2 00
Best potato digger	Grangers Union	Stockton	\$3 00
Best plow for all purposes	Grangers Union	Stockton	\$3 00
Best gang plow	H. C. Shaw	Stockton	\$3 00
Best sulky plow	M. P. Henderson & Son.	Stockton	\$3 00
Best fanning mill	S. C. H. & A. W'ks.	Stockton	\$3 00
Best farm gate	Drum & Cameron	Sacramento	\$2 00
Best grain clean'g attachm't for thrasher.	S. C. H. & A. W'ks.	Stockton	\$3 00
Best grain cleaner, independent	S. C. H. & A. W'ks.	Stockton	\$2 00
Best harrow	Truman, Hooker & Co.	San Francisco	\$3 00
Best horse rake	M. P. Henderson & Son.	Stockton	\$3 00
Best hay and straw cutter	Grangers Union	Stockton	\$2 00
Best derrick fork	Grangers Union	Stockton	\$3 00
Best display of haying and harvesting tools	M. P. Henderson & Son.	Stockton	\$6 00
Best farm wagon for general purposes, wood or iron	M. P. Henderson & Son.	Stockton	\$4 00
Iron frame four-furrow gang plow	Truman, Hooker & Co.	San Francisco	Diploma.
Bain iron wagon	John Caine	Stockton	Diploma.
CLASS II—MACHINERY, BLACKSMITH WORK, ETC.			
Best display of agricultural implements, by any one house, Cal. manufacture	S. C. H. & A. W'ks	Stockton	\$20 00
Best steam engine, Cal. manufacture	Strait & Cadle	Stockton	\$15 00
Best windmill	R. F. Wilson	Stockton	\$5 00
Tempest windmill	A. L. Davis	Stockton	Sp. men.

THIRD DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS III—TOOLS AND HOUSEHOLD IMPLEMENTS.			
Best churn	Smith & Martin .....	.....	.....\$2 00
Best washing machine	Grangers Union	Stockton	\$2 00
Best wine press	Grangers Union	Stockton	\$2 00
Best display of horseshoes	Boyd & Morgan	Stockton	\$3 00
CLASS IV—VEHICLES.			
Best and largest display	M. P. Henderson & Son	Stockton	\$10 00
Best and largest display	H. C. Shaw	Stockton	Sp. men.
Best family carriage	M. P. Henderson & Son	Stockton	\$5 00
Best top buggy	M. P. Henderson & Son	Stockton	\$3 00
Best open buggy	M. P. Henderson & Son	Stockton	\$2 00
Best two-seated open wagon	H. C. Shaw	Stockton	\$1 50
Best two-seated open wagon	M. P. Henderson & Son	Stockton	\$1 50
Best trotting wagon	M. P. Henderson & Son	Stockton	\$2 00
Best spring market wagon	H. C. Shaw Plow Works	Stockton	\$2 00
Best ladies' phaeton	M. P. Henderson & Son	Stockton	\$3 00
Best wagon or carriage brake	M. P. Henderson & Son	Stockton	\$1 00
Best carriage springs	M. P. Henderson & Son	Stockton	\$2 00
Best buckboard	M. P. Henderson & Son	Stockton	Sp. men.
Best display of carriage materials, wheels, and trimmings	M. P. Henderson & Son	Stockton	\$4 00
Best display of vehicles manufactured in California, variety considered; only one vehicle of a kind admitted in display ..	M. P. Henderson & Son	Stockton	\$7 50

FOURTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I—FINE ARTS, ETC.			
Best specimen of marine painting	Walter E. Steves ..	Stockton	\$5 00
Second best specimen of marine painting ..	Mrs. G. A. Atherton ..	Stockton	\$2 00
Best specimen of portrait painting	J. P. Spooner	Stockton	\$7 50
Second best specimen of portrait painting ..	Joseph Goyette	Stockton	\$2 50
Best specimen of portrait painting	J. P. Spooner	Stockton	Diploma.
Best specimen of figure painting	Mrs. M. H. Ober	Stockton	\$3 00
Best specimen of landscape painting	Miss Alma Clapp	Stockton	\$7 50
Second best specimen of landscape painting ..	Mrs. G. A. Atherton ..	Stockton	\$2 50
Specimen of figure painting	J. P. Spooner	Stockton	Diploma.
Best specimen of animal painting	Walter E. Steves	Stockton	\$2 50
Animal painting	Miss Alma Clapp	Stockton	Diploma.
Best display of plaque painting	Mrs. G. A. Atherton ..	Stockton	\$3 00
Second best display of plaque painting	Mrs. J. C. McCall	Stockton	\$1 00
Best specimen of flower painting	Mrs. J. L. Beecher	Stockton	\$3 00
Second best specimen of flower painting	Miss Alma Clapp	Stockton	\$1 00
Best California wild flowers, in oil	Miss Alma Clapp	Stockton	\$5 00
California wild flowers, in oil	Mrs. G. S. Alard	Stockton	Diploma.
Best specimen of fruit painting	Walter E. Steves	Stockton	\$3 00
Second best specimen of fruit painting	Miss Alma Clapp	Stockton	\$1 00
Best general exhibition of paintings in oil ..	Mrs. G. A. Atherton ..	Stockton	\$10 00
Best exhibit of paintings in oil, from life ..	Walter E. Steves	Stockton	Prem. rec.

FOURTH DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Best California wild flowers.....	Mrs. G. S. Allard..	Stockton	\$3 00
Best specimen of landscape painting....	Miss N. Littlehale..	Stockton	\$5 00
Best display of flower painting.....	Miss N. Littlehale..	Stockton	\$3 00
Best pencil drawing.....	St. Mary's College..	Stockton	\$1 50
Colored crayon, solar portrait	J. P. Spooner.....	Stockton	Diploma.
Basket of wild flowers.....	Mrs. G. S. Allard..	Stockton	Diploma.
EXHIBITIONS.			
Best photographs	J. P. Spooner.....	Stockton	\$10 00
Best penmanship	F. E. Cook	Stockton	\$3 00
Best crayon drawings	Mrs. W. O. Robin- son	Stockton	\$2 50
Best colored crayon drawings	J. P. Spooner.....	Stockton	Diploma.
Best black crayon drawings	J. P. Spooner.....	Stockton	Diploma.
Best pen drawings	Miss N. Littlehale..	Stockton	\$3 00
Lineal system of teaching geography....	W. M. Bours	Stockton	Diploma.
CLASS II—ORNAMENTAL PAINTING.			
Best luster painting	Miss Alma Clapp..	Stockton	\$2 00
Best kensington painting	Miss Alma Clapp..	Stockton	\$2 00
Best painting on china	Mrs. Sarah E. Dorr..	Stockton	\$2 00
Second best painting on china.....	Mrs. J. C. McCall..	Stockton	\$1 00
Best painting on silk	Miss N. Littlehale..	Stockton	\$2 00
Best painting on bolting cloth.....	Mrs. G. S. Allard ..	Stockton	\$2 00
Best painting on mirror	Mrs. G. S. Allard ..	Stockton	\$2 00
Second best painting on mirror	Walter E. Steves ..	Stockton	\$1 00
Best panel painting	Mrs. G. A. Atherton..	Stockton	\$2 00
Best crayon sketch of a point in or near Stockton	Walter E. Steves ..	Stockton	\$2 00
Best collection of paintings of all kinds by any one person.....	Miss N. Littlehale..	Stockton	\$10 00
Second best collection of paintings of all kinds by any one person	Walter E. Steves ..	Stockton	\$4 00
Best painted tile	Mrs. G. A. Atherton..	Stockton	\$1 50
Best black and white paintings.....	Mrs. G. A. Atherton..	Stockton	\$2 00
CLASS III—SILK CULTURE.			
Best display of silk cocoons	Mrs. J. D. Utt	Stockton	\$10 00
Second best display of silk cocoons, wild and tame	Joseph Neumann ..	San Francisco ..	\$4 00
Best display of reeled silk	Joseph Neumann ..	San Francisco ..	G. M. rec.
Display of reeled silk	Mrs. J. D. Utt	Stockton	\$8, special prem. rec.
Best display of domestic silk, raised and manufactured in California	Joseph Neumann ..	San Francisco ..	\$8 00
Display of reeled silk and silk cocoons ..	Mrs. J. C. Reid	Stockton	Diploma.
CLASS IV—NEEDLEWORK, ETC.			
Best embroidery, raised	Mrs. J. C. McCall..	Stockton	\$3 00
Second best embroidery, raised	Mrs. R. W. Miller ..	Stockton	\$1 00
Best embroidery, silk on flannel.....	Miss W. Fullerton..	Stockton	\$3 00
Best embroidery, cross stitch.....	Mrs. R. W. Miller ..	Stockton	\$1 50
Best embroidery, etching	Miss W. Fullerton..	Stockton	\$1 00
Best embroidery, kensington, in crewel or wool	Mrs. J. C. McCall..	Stockton	\$3 00
Best embroidery, kensington, in silk	Mrs. J. C. McCall..	Stockton	\$3 00
Second best embroidery, kensington, in silk	Mrs. R. W. Miller ..	Stockton	\$1 00
Best embroidery, arrasene	Mrs. J. L. Beecher..	Stockton	\$3 00
Second best embroidery, arrasene	Mrs. W. B. West ..	Stockton	\$1 00
Embroidery, arrasene	Mrs. J. C. McCall..	Stockton	\$1 00
Best embroidery, chenille	Mrs. Chas. Wagner ..	Stockton	\$3 00
Best embroidery, tinsel	Mrs. Joseph Hale ..	Stockton	\$1 00
Best crochet	Mrs. R. W. Miller ..	Stockton	\$1 00
Best crochet shawl	Mrs. W. B. West ..	Stockton	\$3 00
Best carriage afghan	Mrs. M. P. Marshall ..	Stockton	\$3 00
Second best carriage afghan.....	Mrs. W. B. West ..	Stockton	\$1 00

NOTE.—The committee recommended a special premium for the special exhibition of twenty paintings not entered for competition, shown by Norton Bush of Sacramento.

FOURTH DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Best specimen of etching.....	Mrs. Joseph Hale	Stockton	\$1 00
Best cotton knitting.....	Miss F. Thompson	Stockton	\$1 50
Best worsted knitting.....	Mrs. J. C. Reid	Stockton	\$1 50
Second best worsted knitting.....	Mrs. J. G. Giovannessi	Stockton	\$1 00
Best darned net.....	Miss W. Fullerton	Stockton	\$1 00
Display of hand knit underwear	Mrs. Pennell	Stockton	\$1 00
Best hand made lace	Mrs. J. D. Utt	Stockton	\$2 00
Hand made lace	Mrs. J. G. Giovannessi	Stockton	\$1 50
Best toilet set of scram	Mrs. R. W. Miller	Stockton	\$1 00
Best fancy apron for lady.....	Miss L. F. Booker	Stockton	\$1 00
Best Spanish drawn work	Miss M. Cabezat	Stockton	\$2 50
Second best Spanish drawn work.....	Mrs. S. E. Dorr	Stockton	\$1 00
Best lace handkerchief.....	Miss W. Fullerton	Stockton	\$1 00
Best ornamental perfume satchet	Mrs. J. C. McCall	Stockton	\$1 00
Best display of drawn thread work.....	Miss M. Cabezat	Stockton	\$2 00
Best display of hemstitching	Miss R. W. Miller	Stockton	\$2 00
Second best display of hemstitching	Mrs. S. E. Dorr	Stockton	\$1 00
Best and largest display of fancy work made by exhibitor.....	Mrs. W. O. Robinson	Stockton	Sub. to
Best embroidered banner in silk.....	Mrs. W. O. Robinson	Stockton	Indep't.
Best macrame.....	Mrs. F. Leon	Stockton	\$1 00
Silk knitted purse.....	Mrs. Giovannessi	Stockton	\$1 00
Best drawn rug	Mrs. M. Netz	Stockton	\$1 50
Best braided rug	Mrs. Jos. Hale	Stockton	\$1 00
Best patchwork quilt.....	Mrs. Harvey Bellden	Stockton	\$3 00
Second best patchwork quilt	Miss F. Thompson	Stockton	\$1 00
Best worsted skirt.....	Mrs. Jos. Hale	Stockton	\$3 00
Second best worsted skirt	Mrs. J. D. Utt	Stockton	\$1 00
Best paper flowers.....	Miss Bessie Austin	Stockton	\$1 00
Best lambrequin	Mrs. J. L. Beecher	Stockton	\$2 00
Best hair flowers	Mrs. M. Netz	Stockton	\$1 50
Best shell work.....	Mrs. J. W. Hart	Stockton	\$1 50
Best crazy quilt	Miss M. Marshall	Stockton	\$5 00
Second best crazy quilt.....	Miss W. Fullerton	Stockton	\$2 00
Best embroidered panel.....	Mrs. W. O. Robinson	Stockton	\$1 50
Best knitted slumber robe.....	Mrs. Jos. Hale	Stockton	\$2 00
Best pair silk stockings.....	Mrs. Jos. Hale	Stockton	\$1 00
Best table scarf	Mrs. J. C. McCall	Stockton	\$2 00
Best table cover	Mrs. J. C. McCall	Stockton	\$2 50
Case of all kinds of fancy work	Mrs. Mitchell	Stockton	Sp. pr. \$2
Best calico dress for a lady over fourteen years of age, and shown by exhibitor.....	Miss Castle	Stockton	\$2 00
Best calico dress for a lady or miss under fourteen years of age, and shown by exhibitor.....	Miss Dorr	Stockton	\$5 00
CLASS VI—DISPLAYS.			
Best general display of dry goods	Alex. Chalmers	Stockton	\$10 00
Best general display of cloaks and wraps.....	Alex. Chalmers	Stockton	\$5 00
Best general display of ladies and children's underwear.....	Mrs. M. H. Ober	San Francisco	\$3 00
Best general display of hats and caps	Lothrop & Noble	Stockton	\$5 00
Best general display of groceries	Liebenbaum Bros.	San Francisco	\$7 50
Best general display of hardware, stoves, etc.....	Jackson & Earle	Stockton	\$7 50
Best general display of cigars and tobacco raised in the county	Alonzo Rhodes	Stockton	\$5 00
Best general display of druggists' sundries	H. H. Moore & Sons	Stockton	\$5 00
Best general display of musical instruments	A. L. Bancroft & Co.	San Francisco	\$10 00
Best general display of millinery.....	Mrs. M. Netz	Stockton	\$6 00
Best general display of ladies' hats and bonnets	Mrs. M. Netz	Stockton	\$2 00

FOURTH DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Best general display of flowers	Mrs. M. Netz	Stockton	\$2 00
Best general display of feathers	Mrs. M. Netz	Stockton	\$2 00
Best general display of ribbons	Mrs. M. Netz	Stockton	\$2 00
Best general display of children's millinery	Mrs. M. Netz	Stockton	\$2 00
Best general display of hardware and electrical goods	Austin Bros.	Stockton	\$7 50
Display of musical instruments	Benj. Curtaz & Son.	San Francisco ..	Diploma.
Display of millinery	Misses A. & N. Fyfe.	Stockton	\$4 00
Ornamental drawing	Jas. Barricklo	Stockton	Am. Agr.
Mechanical drawing	James Larkin	Stockton	Am. Agr.
Map drawing	John Garrow	Stockton	Am. Agr.
Best county exhibit	Pomona Grange	San Joaquin Co. ..	\$150 00
MISCELLANEOUS.			
General display of soaps	Capital Soap W'ks.	Sacramento	Sil. med.
Hawkeye fence machine	L. H. Evans .....	.....	Dip. rec.
Domestic sewing machine	J. E. Wood	Stockton	Dip. rec.
Furniture and wood carving of California manufacture	M. Schneider	Stockton	Pre. rec.
Display of shells	Mrs. Alice Kafitz ..	Stockton	Pre. rec.
Native silkworms and its products	Joseph Neumann ..	San Francisco ..	G. M. rec.
Embroidered lace	Miss L. F. Booker ..	Stockton	Pre. rec.

NOTE.—The committee recommend a diploma for the display of druggists' sundries made by I. D. Holden, Stockton.

SCHOOL WORK.

Display of architectural drawings, relief maps, model houses made to scale, geometrical figures made from pattern, penmanship, pen drawings, crayon free-hand drawings, relief maps for merit, and general display of pupils of St. Mary's College. Your committee recommend special premiums:

John Powers, for mechanical drawing, and Walter Morrissey and Miss E. D. Ewing, for map drawing.

FREE-HAND PENCIL DRAWING.

Primary Class.—Patrick E. Breen, James McEneny, and Harry Edwards.

Intermediate Class.—William Garrow, William Deegan, and John Tulan.

Second Grade.—Frank Garrow, Daniel Crowell, and Arthur Henley.

First Grade.—John Garrow, James R. Barricklo, and John Barricklo.

High Class.—Thomas Henery and John Toomey.

PEN DRAWING.

James J. Larkin and John J. Barrett.

ORNAMENTAL PENMANSHIP.

James J. Larkin.

CRAYON FREE-HAND DRAWING.

Robert Covert, William Young, and James Fitzgerald.

PENMANSHIP.

Primary Class.—Patrick E. Breen, James McEneny, and William Blaney.

Intermediate Class.—Joseph Peri, Arthur Clark, and John Tulan.

Second Grade.—Daniel Hogan, Frank Garrow, and Manuel Meza.

First Grade.—James R. Barricklo, John Garrow, and Walter A. Morrissey.

High Class.—James J. Larkin, John J. Barricklo, and Henry Fee.

ARCHITECTURAL DRAWINGS.

James J. Larkin, Henry Fee, and John Covert.

MODEL HOUSES.

Robert Winter, George Earl, and Emile Musto.

GEOMETRICAL FIGURES.

James J. Larkin, William Young, and Henry Fee.

PREMIUMS—SPECIAL BABY SHOW.

Clougherty twins	Pair bonnets.
McCann twins	Pair dresses.
McLean twins	Pair gold pins.
O'Connell twins	Pair gold rings.
Williams twins	Special, \$1 00
Clark twins	Special, \$1 00
Hart twins (colored)	Special, \$5 00
Eva Howell	\$2 50
Wilbur Rush	Pair silk shirts.
Gladys Swain	Gold pin.
Frankie Knowles	\$2 50
G. C. Turner	Toilet case and \$1 00
Isabel Arnest	\$2 50
Owen L. Meisel	\$2 50
Nellie Evans	Knitted hood.
Florence I. Davis	\$2 50
Walter Snow	\$1 00
Frances Sullivan	\$1 00

COMMITTEE.—R. C. Sargent, Mrs. Alice Kafitz, Mrs. F. Arnold, F. G. Brown, Mrs. F. Bugbee, Mrs. B. C. Crawford, L. U. Shippee, Mrs. P. T. Brown, J. K. Doak, James Cavin, Mrs. J. N. Castle, A. Leitch.

PREMIUMS SECOND SPECIAL BABY SHOW.

Under Six Months of Age.

Fannie R. Sturcke	\$2 50
Jessie Duffy	\$1 25
Charlie Blair	\$2 50

Between Six and Twelve Months of Age.

Rosa Day	\$2 50
Hattie F. Ray	\$1 25
Edna Young	\$1 25
Ida Drisdon (Special)	\$1 50
Royal Morey	\$2 50

Between Twelve and Eighteen Months of Age.

Eleanor Chidister	\$2 50
Christina Gerlach	\$1 25
Raymond Morey	\$2 50
George C. Turner	\$1 25
Edna Myers	Gold pin
Mabel A. Pusey (Special for smartest baby)	\$1 50

COMMITTEE.—H. C. Shaw, S. D. Woods, Phil. S. Beel, Mrs. F. T. Baldwin, Mrs. Anderson, Mrs. M. Netz, Mrs. Milton Hart.

SPEED PROGRAMME.

TUESDAY, SEPTEMBER 18, 1888.

RACE No. 1—RUNNING.

State running. For two-year olds. Seventy-five dollars stake; two hundred and fifty dollars added. Mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Floodtide, b. c., by Flood	A. Lathrop	San Francisco.
Aurelia, ch. f., by Wildidle	A. Lathrop	San Francisco.
Shannon Rose, b. f., by Shannon	A. Lathrop	San Francisco.
Cassandra, b. f., by imp. Kyrle Daly	B. C. Holly	Vallejo.
Agnes B, ch. f., by imp. Glengary	L. U. Shippee	Stockton.
Songstress, b. f., by Luke Blackburn	L. U. Shippee	Stockton.
Picnic, b. f., by imp. Mr. Pickwick	L. U. Shippee	Stockton.

Walkover for Agnes B.

RACE No. 2—TROTTING.

District trotting. Four-year olds. Seventy-five dollars stake; two hundred dollars added. Four moneys. Closed February 10, 1888. Mile and repeat; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
J. C. Shelley, b. c., by Hawthorne	L. U. Shippee	Stockton.
Moses S, b. h., by Hawthorne	L. U. Shippee	Stockton.
Nettie C, b. f., by Elector	H. Nicewonger	Stockton.
Leck, b. g., by Elector	H. Nicewonger	Stockton.
Flora M, b. f., by Elector	G. H. Miller	Stockton.
Reliable, b. c., by Reliance	C. W. Turner	Stockton.
Steve Whipple, br. h., by Chrisman's Hamble- tonian	C. E. Needham	Tracy.
Prince Albert, b. g., by Dexter Prince	L. M. Morse	Lodi.

SUMMARY.

Steve Whipple	1	1	1
Moses S	2	2	2
Leck	dis.		

Time—2:27 $\frac{1}{4}$; 2:29; 2:32.

WEDNESDAY, SEPTEMBER 19, 1888.

RACE NO. 4—RUNNING.

Jim Duffy Purse. Four hundred dollars. Four moneys. Free for all. Mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Idalene Cotton, ch. f., by Jim Brown.....	Maltese Villa Stables.....	Merced.
Heliotrope, b. m., by Joe Hooker.....	Mrs. S. B. Wolfskill.....	Santa Monica.
Bay Bolton, b. c., by Wildidle.....	L. A. Lacey.....	Fresno.
Welcome, b. m., by Warwick.....	Dan Hennessey.....	Sacramento.
Oro, r. s., by Norfolk.....	Owens Bros.....	Fresno.
Jack Brady, b. h., by Wildidle.....	W. L. Davis.....	Copperopolis.
Applause, b. g., by Three Cheers.....	T. G. Jones.....	Santa Rosa.
Nancy, ch. f., by Jim Brown.....	B. C. Holly.....	Vallejo.
Four Aces, s. c., by Hockhocking.....	J. D. Dunn.....	Los Angeles.
Mikado, c. g., by Shiloh.....	B. P. Hill.....	San Diego.
Carmalita, b. m., by Hardwood.....	B. P. Hill.....	San Diego.
Brutus, b. c., by Macgregor.....	Palo Alto Stock Farm.....	San Francisco.

SUMMARY.

Heliotrope.....	1
Welcome.....	2
Oro.....	3
Applause.....	0

Time—1:43 $\frac{3}{4}$.

RACE NO. 6—TROTTING.

District trotting. Three-year olds. Seventy-five dollars stake; two hundred dollars added. Four moneys. Three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Moses S, b. c., by Hawthorne.....	L. U. Shippee.....	Stockton.
Ida May, br. f., by Hawthorne.....	L. U. Shippee.....	Stockton.
Belle Tone, b. f., by Elector.....	L. A. Richards.....	Grayson.
Grace Vernon, br. f., by Mt. Vernon.....	G. W. Fox.....	Stockton.
—, b. c., by Director.....	L. M. Morse.....	Lodi.

SUMMARY.

Moses S.....	1	1	1
Grace Vernon.....	2	2	2

Time—2:50; 2:50; 2:55 $\frac{1}{4}$.

RACE No. 7—TROTTING.

District trotting. For three-year olds. Seventy-five dollars entrance; two hundred dollars added. Four moneys. Best two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
J R, br. c., by Elector	W. Murray	Grayson.
Kilrain, b. c., by Hawthorne	L. U. Shippee	Stockton.
Motion, b. c., by Electioneer	L. U. Shippee	Stockton.
Kittie Vernon, s. f., by Mt. Vernon	G. M. French	Stockton.
She, b. f., by Mt. Vernon	G. W. Fox	Stockton.
Jessie May, b. f., by Elector	G. H. Miller	Stockton.
Sadie, b. f., by Elector	L. A. Richards	Grayson.
Homer, b. c., by Dexter Prince	L. M. Morse	Lodi.
Idalene, b. c., by Dexter Prince	L. M. Morse	Lodi.
—, s. c., by Ross S.	R. C. Sargent	Lodi.

SUMMARY.

J R	1	1
Kilrain	2	2

Time—2:33 $\frac{3}{4}$; 2:41.

THURSDAY, SEPTEMBER 20, 1888.

RACE No. 9—TROTTING.

Pacific Coast trotting. 2:35 Class. Purse, one thousand dollars. Four moneys. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Perihelion, b. h., by Admiral	W. S. Ray	San Francisco.
Ben Ali, b. g., by G. M. Patchen	J. A. Goldsmith	Oakland.
Stoneman, br. g., sire unknown	C. T. Bunch	Ione.
Sonnet, b. f., by Bentonian	Palo Alto Stock Farm	San Francisco.
Cal Lambert, b. h., by Ben Franklin	L. U. Shippee	Stockton.

SUMMARY.

Ben Ali	1	1	2	1
Sonnet	2	2	1	2
Perihelion	dis.			

Time—2:25 $\frac{1}{2}$; 2:26 $\frac{1}{2}$; 2:24 $\frac{1}{2}$; 2:30 $\frac{1}{2}$.

RACE No. 10—TROTTING.

State trotting. For four-year olds. Seventy-five dollars entrance; two hundred dollars added. Four moneys. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Last Chance, g. g., by Romero	A. A. Miller	Pleasanton.
Shamrock, blk. c., by Buccaneer	G. Valensin	Pleasanton.
Rex, b. g., by Anteeo	H. W. Seale	Mayfield.
J C Shelley, b. c., by Hawthorne	L. U. Shippee	Stockton.
Moses S. b. c., by Hawthorne	L. U. Shippee	Stockton.
Nettie C, b. f., by Elector	H. Nicewonger	Stockton.
Leck, b. g., by Elector	H. Nicewonger	Stockton.
Flora M. b. f., by Elector	G. H. Miller	Stockton.
Steve Whipple, br. h., by Chrisman's Hambletonian	C. E. Needham	Tracy.
Dubec, b. g., by Sultan	L. J. Rose	Los Angeles.
Prince Albert, b. g., by Dexter Prince	L. M. Morse	Lodi.

SUMMARY.

Steve Whipple	1	1	1
Dubec	2	2	2

Time—2:26; 2:23; 2:28.

RACE No. 11—PACING.

Pacific Coast pacing. 2:27 Class. Purse, five hundred dollars. Four moneys. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Little Hope, ch. g., by Tempest	W. Bradbury	San Francisco.
Damiana, s. g., by Admiral	L. E. Clawson	San Francisco.
Racquet, blk. g., sire unknown	C. I. Havens	San Francisco.
T B, s. h., by Guarantee	Owens Bros.	Fresno.
Hector C, s. h., by Prime	W. D. Hamilton	Stockton.
Dixey, b. s., sire unknown	J. H. Brown	Fresno.
Ned Winslow, b. g., by Tom Benton	J. L. McCord	Sacramento.
Little Doc, b. g., sire unknown	F. Seguin	Ione.
Goldleaf, c. f., by Sidney	Pleasant'n Stock Farm	Pleasanton.
San Diego, b. g., by Victor	H. C. Airhart	San Diego.

SUMMARY.

Goldleaf	1	1	1
Ned Winslow	2	2	3
San Diego	3	3	2
Little Hope	4	dis.	

Time—2:21; 2:21½; 2:20½.

FRIDAY, SEPTEMBER 21, 1888.

RACE No. 12—RUNNING.

Free for all. Running. Purse, three hundred and fifty dollars. Four moneys. Half mile and repeat. Best two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Springwater, b. s., by Hubbard	T. B. Lowry	Fresno.
Johnny Gray, g. s., by Shiloh	Owen Bros.	Fresno.
Jack Brady, b. h., by Wildidle	W. L. Davis	Copperopolis.
Lida Ferguson, ch. m., sire unknown	H. Willets	Ione.
Kildare, s. g., sire unknown	T. G. Jones	Santa Rosa.
Susie S, b. m., by Wood	L. E. Sturgill	Ione.
Adam, c. g., by Reveille	B. P. Hill	San Diego.
Gladstone, s. g., by Reveille	B. P. Hill	San Diego.
Sleepy Dick, ch., sire unknown	F. Starkey	Clements.

SUMMARY.

Lida Ferguson	2	1	1
Sleepy Dick	1	3	2
Johnny Gray	4	2	r.o.
Springwater	3	dis.	

Time—0:49; 0:50; 0:54.

RACE No. 13—TROTTING.

Free for all. Trotting. Purse, one thousand two hundred dollars. Four moneys. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Arab, b. g., by Arthurton	O. A. Hickok	San Francisco.
Lot Slocum, b. g., by Electioneer	A. Gonzales	San Francisco.
Adair, b. g., sire unknown	J. A. Dustin	Oakland.
Stamboul, b. h., by Sultan	L. J. Rose	Los Angeles.
Director, blk. h., by Dictator	Pleasant'n Stock Farm	Pleasanton.

SUMMARY.

Arab	1	2	1	1
Stamboul	2	1	2	2
Lot Slocum	3	3	dr.	

Time—2:16; 2:15 $\frac{3}{4}$; 2:17 $\frac{1}{2}$; 2:22 $\frac{1}{4}$.

RACE No. 14—TROTTING.

For Pacific Coast horses. 2:22 Class. Purse, one thousand two hundred dollars. Four moneys. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Tempest, b. m., by Hawthorne	L. U. Shippee	Stockton.
Manie Comet, s. m., by Nutwood	J. A. Goldsmith	Oakland.
Gus Wilkes, b. g., by Mambrino Wilkes	J. A. Dustin	Oakland.
Thapsin, b. g., by Berlin	W. F. Smith	Sacramento.
Alcazar, b. c., by Sultan	L. J. Rose	Los Angeles.
Gertrude Russell, b. f., by Electioneer	Palo Alto Stock Farm	San Francisco.
Alfred S, b. s., by Norah Marshall	H. W. Seale	Mayfield.

SUMMARY.

Tempest	1	2	2	1	1
Gus Wilkes	4	1	1	2	2
Thapsin	2	4	4	3	3
Alcazar	3	3	3	4	4

Time—2:20½; 2:22; 2:23; 2:24½; 2:19.

SATURDAY, SEPTEMBER 22, 1888.

RACE No. 15—TROTTING.

For Pacific Coast three-year olds. Stake, seventy-five dollars. Four moneys. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Direct, b. c., by Director	Pleasant'n Stock Farm	Pleasanton.
Little Black Jug, b. c., by Director	Pleasant'n Stock Farm	Pleasanton.
Strathway, c. c., by Steinway	Westwood Stock Farm	Visalia.
Minot, b. g., by Bay Rose	E. Giddings	San Rafael.
Sister, b. g., by Sidney	J. A. Goldsmith	Oakland.
Moses S, b. c., by Hawthorne	L. U. Shippee	Stockton.
Ida M, b. f., by Hawthorne	L. U. Shippee	Stockton.
Ben Davis, ch. g., by Great Tom	B. C. Holly	Vallejo.
Mehushta, b. f., by Stamboul	L. J. Rose	Los Angeles.

SUMMARY.

Direct	1	1	1
Moses S	2	2	3
Ben Davis	3	3	2

Time—2:23¾; 2:29; 2:30.

RACE No. 16—RUNNING.

Pacific Coast running. Three-year olds. Seventy-five dollar stake. Two hundred and fifty dollars added. Four moneys. Mile heats.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Serpolette, s. f., by Norfolk	Owen Bros.	Fresno.
Corona, b. f., by Norfolk	Owen Bros.	Fresno.
Sid, b. c., by Sidarthur	B. C. Holly	Vallejo.
Hermese, b. h., by Bayswater	L. A. Blasingame	Fresno.

Walkover for Serpolette.

RACE No. 17—TROTTING.

Pacific Coast trotting. Two-year olds. Seventy-five dollar stake. Two hundred and fifty dollars added. Four moneys. Mile heats; two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Margaret S, b. f., by Director	Pleasant'n Stock Farm	Pleasanton.
Edwin G, s. g., by Sidney	E. Giddings	San Rafael.
Skipperway, b. f., by Conductor	J. E. Durham	Concord.
General Logan, b. c., by Alex Button	Hoppin Bros.	Yolo.
Kilrain, b. c., by Hawthorne	L. U. Shippee	Stockton.
Motion, b. c., by Electioneer	L. U. Shippee	Stockton.
Secretary, blk. c., by Director	D. S. Frasier	Pleasanton.
Visola, b. f., by Stamboul	L. J. Rose	Los Angeles.
Lady Washington, s. f., by Ross S	R. C. Sargent	Lodi.

SUMMARY.

Visola.....	2	1	1
Margaret S.....	1	2	2

Time—2:34½; 2:29½; 2:32¾.

RACE No. 19—TROTTING.

Pacific Coast trotting. 2:27 Class. Purse, one thousand dollars. Four moneys. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Barbaro, g. s., by Len Rose.....	Owen Bros.....	Fresno.
Fallis, b. s., by Electioneer.....	F. P. Lowell.....	Sacramento.
Ha Ha, b. s., by Nephew.....	Houser & Soule.....	Stockton.
Emma Temple, b. m., by Jack Temple.....	H. H. Helman.....	Visalia.
Ed, b. g., by Irwin Davis.....	A. T. Jackson.....	Stockton.
Rosa Mc, b. m., by Alex Button.....	G. W. Woodard.....	Yolo.
Elector, b. h., by Electioneer.....	O. A. Hickok.....	Oakland.
Bonanza, s. s., by Arthurton.....	R. Havey.....	San Mateo.
Ben Ali, b. g., by G. M. Patchen.....	J. A. Goldsmith.....	Oakland.
Artist, b. g., by Gold Dust.....	J. R. Hodson.....	Sacramento.
Judge, b. g.....	J. Dustian.....	Oakland.
Express, b. g., by Electioneer.....	Palo Alto Stock Farm.....	San Francisco.
Franklin, b. g., by General Reno.....	C. Davis.....	San Francisco.

SUMMARY.

Franklin.....	1	1	1
Rosa Mc.....	2	2	2
Ha Ha.....	3	3	3
Ed.....	4	4	4
Barbaro.....	5	dis.	

Time—2:22½; 2:21; 2:20½.

TUESDAY, SEPTEMBER 18, 1888.

RACE No. 20—SPECIAL TROTTING.

Premium, Noye's trotting cart given by H. C. Shaw Plow Company. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Old Mack, b. h., by John Miller.....	C. A. Stowe.....	Stockton.
Roscoe Conkling, b. h., by Ben Allen.....	G. M. Sampson.....	Stockton.
Bess, b. m., by Reliance.....	A. W. Robinson.....	Stockton.
Tommy, blk. h.....	H. Gregg.....	Stockton.
Hurrah, b. m.....	J. W. Dougherty.....	Stockton.
Minnie F, b. m.....	A. C. Glenn.....	Stockton.
Cleo, br. m., by Nephew.....	J. S. Durham.....	Stockton.
Sailor, br. h., by Chieftain.....	C. E. Thompson.....	Stockton.
Prince, b. h., by Pryam.....	C. L. Ortman.....	Stockton.
Paul Shirley, b. h., by Nephew.....	G. W. Trahern.....	Stockton.
Dixie, buckskin.....	Percy Williams.....	Stockton.
Catherine, b. m., by Peerless.....	P. T. Brown.....	Stockton.
Lady Washington, c. c., by Nephew.....	R. C. Sargent.....	Stockton.

TRANSACTIONS OF THE

SUMMARY.

Sailor	2	1	1	1
Bess	1	2	3	2
Cleo	3	3	2	
Prince	4	5	3	
Catherine	5	4	4	

Balance of horses trotted, but were not placed.

Time—2:52½; 2:47; 2:45; 2:48¾.

RACE No. 21—TROTTING.

Special trotting. Purse, two hundred and fifty dollars. Four moneys. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Cal Lambert, b. h., by Ben Franklin.....	L. U. Shippee	Stockton.
Ed, b. g., by Irwin Davis	A. T. Jackson	Stockton.
Ha Ha, b. s., by Nephew	W. Houser	Stockton.
Ben Ali, b. g., by G. M. Patchen	Dick Havey.....	San Francisco.

SUMMARY.

Ben Ali	2	1	2	0	2	1	1
Ha Ha	3	2	1	0	1	2	2
Ed	4	4	3	2	3	r. o.	
Cal Lambert.....	1	3	4	dr.			

Time—2:30½; 2:28¼; 2:29¼; 2:31; 2:31; 2:30¾; 2:36.

WEDNESDAY, SEPTEMBER 19, 1888.

RACE No. 22—RUNNING.

Special running. Purse, one hundred and fifty dollars. Two moneys; two thirds and one third. Three-quarter mile heats; two in three.

Name and Pedigree of Horse.	By Whom Entered	Address.
Elwood, c. g., by Norfolk.....	Maltese Villa Stables	Merced.
Kildare, s. g., pedigree unknown	T. Jones	Santa Rosa.
Johnny Gray, g. s., by Shiloh	Owen Bros.	Fresno.

SUMMARY.

Elwood	2	1	1
Johnny Gray.....	1	2	2
Kildare	3	3	r. o.

Time—1:16; 1:16; 1:18.

THURSDAY, SEPTEMBER 20, 1888.

RACE NO. 23—TROTTING.

Mambrino Wilkes' Colt Stake. Stake, fifty dollars each; two hundred dollars added by Irvin Ayres, owner of Mambrino Wilkes. Four moneys.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Little Mack, b. g.	D. Young	Stockton.
John W, b. c.	J. P. Waterman	Stockton.
Black Diamond	G. Mosher	Stockton.
Wilkie Wilkes	A. T. Jackson	Stockton.
Gussie Wilkes	H. J. Morgan	Stockton.
Pedro	T. Shaw	Stockton.
Jennie Wilkes	W. H. Post	Stockton.

SUMMARY.

Jennie Wilkes	1	1	1
John W	2	2	2
Pedro	3	dis.	
Black Diamond	4	dis.	
Wilkie Wilkes	5	dis.	

Time—3:06; 3:06½; 3:03.

SATURDAY, SEPTEMBER 22, 1888.

RACE NO. 24—PACING.

Special pacing. Purse, seven hundred dollars. Three moneys. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Yolo Maid, by Alex Button	C. R. Hoppin	Yolo.
Goldleaf, c. f., by Sidney	Pleasant n Stock Farm	Pleasanton.
Almont Patchen	W. M. Billups	Colusa.

SUMMARY.

Yolo Maid	1	1	1
Almont Patchen	3	2	2
Goldleaf	2	3	3

Time—2:16½; 2:16½; 2:18.

REPORT OF RACES.

[From the "Breeder and Sportsman."]

The twenty-eighth fair and racing season under the auspices of the San Joaquin Valley Agricultural Society, District No. 2, began on Tuesday, and will continue through the week. The fact that a large proportion of the exhibits had to be brought from Sacramento, where they have been on show at the State Fair, militated against such a complete and satisfactory arrangement either of the industrial or live stock portions of the fair as could have been desired. The pavilion on Tuesday was still in great confusion, and the noise of carpentering, together with paucity of exhibits, kept all but a few enthusiastic sightseers away. At the race track things were better ordered, but even there a little more energy might have accomplished several desired ends. The fence in front of the grand stand has hitherto stood too near the stand, and it was resolved, for the convenience of betters and others who fancy being near the pool boxes, to move it, even though the width of the track was thereby decreased ten feet. The fence was in process of removal during Tuesday afternoon, much to the discomfort of spectators. The stabling and sheds were all put in fit condition in ample time, and the horsemen without exception spoke favorably of Secretary La Rue's attention to details in that line. The track was pronounced first rate by Mr. Salisbury and other experts—being firm, fast, and not hard. The races were announced to begin at one o'clock on Tuesday, but at that hour only a sprinkling of people, principally attachés either of the track or betting stand, were scattered about the grand pavilion.

A new pavilion has been erected this season, and a more airy and comfortable structure of the kind we do not recall. It is set at such an angle with the track as to enable all to see every part of a race without leaving their seats, like the grand stand at Washington Park, Chicago. A new judges' stand also adds to the tout ensemble. A fair criticism upon the fair management is, that in making provision for the comfort and convenience of others they have forgotten to provide adequately for newspaper men, upon whom in a great measure depends the success of fairs. A roomy, sheltered portion of the judges' stand should be fitted with tables and chairs and reserved exclusively for the quill drivers. It would not be asking too much to request, in addition, that an official statement as to all conditions of each race, starters, owners, colors, breeding, etc., be sent by the Clerk of the Course to the reporters before each race.

FIRST DAY.

The weather on Tuesday was perfect, the day being cool and a little breezy. The first race was called at 1:45, by which hour the number of spectators had much increased.

The officers of the day were: Judges—Dr. Latham, Hon. Chris. Green, and Senator B. F. Langford; Timers—Messrs. H. J. Agnew, F. P. Lowell, and C. A. Durfee; Clerk, Fred. Arnold, all of whom stayed at their posts through the long afternoon without remission.

The first race was a two-year old stake, running, at one mile, open to the Pacific Coast, which closed with seven entries, of which but one (Mr. L. U. Shippee's sorrel filly Agnes B), was started. The filly cantered over the course in 2:32, ridden by "Shrimp." A curious thing about Agnes B was that neither her owner, the Clerk, nor any one else knew her breeding, most opinions being that she was by Glenelg.

SUMMARY.

SEPTEMBER 18, 1888.—Running—Pacific Coast two-year old stake. One mile.

L. U. Shippee's Agnes B..... W. O.

The second race was a well contested event, a four-year old trotting stake, open to the district, in which three of the eight entries appeared. Of the starters Steve Whipple had much the best of condition, the others (Leck and Moses S) being a bit high in flesh.

In the first heat, after much scoring, the horses were tapped from a fairly good score, Leck being two lengths behind, Moses S having the pole, Leck next, and Steve Whipple the outside. Whipple opened a lead to the quarter in 0:37½, and held it to the half in 1:13½, Moses S then pushing for a place, but being squarely outtrotted by Whipple, who went the three quarters in 1:51½, and won the heat out in 2:27¼, Moses S three lengths second, Leck shut out. Pools: Steve Whipple \$25, field \$6.

At the first scoring of the second heat Moses S a length to the good, led to the quarter in 0:37½, then lapped by Whipple, and beaten to the half in 1:14½. At three quarters, in 1:52½, Moses was four lengths behind, and when Whipple, under a pull, jogged under the wire in 2:29, Moses had not bettered his place.

No pools were sold on the heat. For the third heat interest could not be excited, Whipple being so patently the better horse. He led easily, doing the quarter in 0:36½; the half in 1:13; three quarters in 1:52¼, and jogging under the wire in 2:32.

SUMMARY.

SEPTEMBER 18, 1888.—Trotting. District. Four-year old stake.

Mr. Needham's Steve Whipple, by Chrisman's Hambletonian—Twist—W. H. Parker.....	1	1	1
L. U. Shippee's Moses S, by Hawthorne; dam, by Black Hawk—Whiting.....	2	2	2
H. Nicewonger's Leck, by Elector—Amanda—Jackson.....	dis.		

Time—2:27¼; 2:29; 2:32.

Pools: Whipple, \$25; field, \$6.

The third race regularly on the card was for a three-minute class, but as it did not fill the Directors offered a special purse of \$250, trotting, for California Lambert, Ha Ha, Ed, and Ben Ali. The race was most unsatisfactory, as Ben Ali was evidently the better horse; but the race was prolonged through five heats without a decision until the famous John Goldsmith got up behind Ben Ali, when that horse took the two succeeding heats right off the reel, as he might have taken the preceding ones if he had had a driver. To charge irregularity without reasonable proofs would be unjust, but it may be said that a dozen or more men, familiar with trotting and the horses under mention, coincided in thinking that the race in the five earlier heats was not what it should have been. At one time Ben Ali sold choice for \$30, field \$5. That heat was taken by Ha Ha, and considerable money taken down.

In the first heat Lambert and Ben Ali fought all the way around, doing the quarters in 0:37¼, 1:14, 1:51½, and 2:30½, the former winning by a head. Pools: Ben Ali \$80, Ha Ha \$6, field \$17 50.

The second heat was in better time—0:36 $\frac{3}{4}$, 1:12 $\frac{1}{4}$, 1:52 $\frac{1}{2}$, and 2:28 $\frac{1}{4}$. The pools in the third heat sold: Ben Ali \$30, field \$5. Ben Ali led easily to the quarter in 0:38, Ed then crowding into the lead to the half in 1:14 $\frac{1}{4}$. Along the backstretch Ha Ha and Ed were sent for the heat, the former having a shade the best of it, and so into the straight, Ha Ha getting the whip sharply and taking the heat in 2:29 $\frac{1}{4}$. Ben Ali lost his feet in the last seventy yards, but was adjudged second, Ed being third, and California Lambert a bad fourth. The latter was withdrawn for lameness. The fourth was pronounced a dead heat, Ben Ali and Ha Ha finishing together in 2:31.

In the fifth Ed showed the way to the quarter in 0:38 $\frac{3}{4}$, Ben Ali breaking badly from the wire. The latter settled, however, and at the half (in 1:14 $\frac{3}{4}$) had the road, and held it to the third quarter, opening a lead of five lengths, Ha Ha apparently being done. Down the stretch Ha Ha recovered, and, trotting fast, caught Ben Ali and won the heat by a length in 2:31, Ben Ali not being extended. For the sixth heat John Goldsmith sat behind Ben Ali and drove the horse out regularly, the time at the quarters being 0:37 $\frac{3}{4}$, 1:14, 1:52 $\frac{1}{2}$, and for the mile 2:30 $\frac{3}{4}$. Ha Ha went into the air on the backstretch and lost ten lengths.

The seventh was a repetition of the preceding, Goldsmith driving his horse and winning the heat and race in 2:36.

SUMMARY.

SEPTEMBER 18, 1888.—Trotting. Special purse, \$250.

J. A. Goldsmith's b. g. Ben Ali, by G. M. Patchen; dam, by Sportsman—	2	1	2	0	2	1	1
Houser & Soule's b. h. Ha Ha, by Nephew; dam, by Blackhawk—	3	2	1	0	1	2	2
A. T. Jackson's b. g. Ed, by Irwin Davis.....	4	4	3	2	3	2	dr.
J. H. Whing's b. h. California Lambert, by Ben Franklin; dam, by Lambert.....	1	3	4	dr.			

Time—2:30 $\frac{1}{2}$; 2:28 $\frac{1}{4}$; 2:29 $\frac{1}{4}$; 2:31; 2:31; 2:30 $\frac{3}{4}$; 2:36.

Betting—Auction pools: Ben Ali, \$25; field, \$14.

The last race of the day was for roadsters, gentlemen owners to drive. Eleven of the thirteen entries appeared, and the varieties of road carts, together with the unprofessional appearance of the owners, created much amusement, Director R. C. Sargent and G. W. Trahern being the especial marks for the witticisms of the judges and spectators. The driving was creditable and the horses of more than average merit, even if one interested spectator did remark, as he looked up the stretch and saw the motley flyers come pounding along at about a two-forty gait, "Be gob, I see 'em, and they'll be here inside of five minutes." The race was for a cart presented by the H. C. Shaw Plow Works.

In the first heat Mr. A. W. Robinson's Bess won, Mr. C. E. Thompson's Sailor second, Mr. J. S. Dunham's Cleo third, Mr. G. W. Sampson's Roscoe Conkling fourth, Mr. Percy Williams' Dixie fifth, and the rest all along the road. Time, 2:52 $\frac{1}{2}$. The next heat brought Sailor in first, Bess next, Cleo third, Mr. C. L. Ortman's Prince fourth, and Mr. P. T. Brown's Catherine fifth. Time, 2:47. Sailor also took the third heat in 2:45, the others placed being Cleo, Bess, Catherine, and Prince, in the order mentioned. The fourth heat also went to pacing Sailor, in 2:48 $\frac{3}{4}$.

SUMMARY.

SEPTEMBER 18, 1888.—Gentlemen's roadsters, owners to drive.

C. E. Thompson's Sailor.....	2	1	1	1
A. W. Robinson's Bess	1	2	3	3
J. D. Dunham's Cleo	3	3	2	4
G. W. Sampson's Roscoe Conkling	4	0	0	0
Percy Williams' Dixie.....	5	0	0	0
P. T. Brown's Catherine.....	6	5	4	0
G. W. Trahern's Paul Shirley.....	0	0	0	0
A. C. Glenn's Minnie.....	0	0	0	0
C. L. Ortman's Prince.....	0	4	5	0
R. C. Sargent's Lady Washington	0	0	0	0
J. W. Dougherty's Hurrah	0	0	0	0

SECOND DAY.

Wednesday dawned fair and with promise of warmer weather than on Tuesday. The pavilion attracted few persons, because the exhibits were not catalogued and arranged. The city was astir at 6 A. M., the visitors evidently desiring to get that for which they had come to town. Fakirs of twenty sorts, each, if possible, more barefaced than the other, offered the rustic capitalist an opportunity to gain largely from a small investment. During the day the "sure thing" men pined, but they harvested large piles of silver in the evening.

The chief interest as usual centered in the racing, and the main receipts of the society were from the gate, through which the choicest of the culture and beauty of Stockton passed between noon and one o'clock. Light colored and evidently light drapery contributed to make elegant equipages noticeable, and if it is written that nowhere in favored California can so much general beauty of classical severity be found, the writing will not be an overestimate. The course was reasonably well occupied by one o'clock, the advertised starting time.

The officers elected to perform the tiresome duties of the day were: Judges, Hon. Chris Green, Hon. L. U. Shippee, Senator B. F. Langford; timers, H. J. Agnew, O. A. Hickok.

The first race, a mile dash, brought six excellent horses to the start. Free for all; purse \$400.

Heliotrope was a strong favorite, selling for \$20 to \$6 for the field. On the third try, starter Billy Donathan sent the half dozen off fairly, Heliotrope, pole, leading to the quarter in 0:26. Then Applause took up the running, and with Nancy was pushed through the backstretch and to the three quarters at a flying rate, too high to be sustained. In the home-stretch Heliotrope raced into command, and finished an easy winner of the race in 1:43 $\frac{3}{4}$. Welcome, Oro, Applause, Nancy, and Boy Bolton finishing as named. The time at the quarters was 0:26, 0:51, and 1:19.

SUMMARY.

SEPTEMBER 19, 1888.—Running, mile dash, free for all; Jim Duffy purse, \$400.

Mrs. S. B. Wolfskill's b. m. Heliotrope, by Joe Hooker-Yolone—Hazlett.....	1
Dan Hennessey's b. m. Welcome, by Warwick-Aeola—Cook.....	2
Owen Bros. r. h. Oro, by Norfolk-Golden Gate—Howson	3
T. G. Jones' b. g. Applause, by Three Cheers—Alice M. Rider—Spooner.....	4
B. C. Holly's ch. f. Nancy, by Jim Brown—Mamie Hubbard—Nole.....	5
L. A. Lacey's b. c. Bay Bolton, by Wildidle—Maggie Early—Night.....	6

Time—1:43 $\frac{3}{4}$.

Pools: Heliotrope, \$20; field, \$6.

The second race, a district trot for three-year olds, was a "one-horse" race, Moses S winning in a go-as-you-please fashion. Two started. Grace Vernon might have been started in an opposite direction, if it was intended that she should pass Moses. The first heat was done in 0:29, 1:17, 2:03, and won by Moses in 2:50, Grace only saving distance because Whiting pulled his horse almost into a walk. The second heat, in 2:50, was like the first. The third was even more pronounced in favor of Moses S. Grace Vernon went into the air at the quarter and galloped to near the head of the stretch, Moses trotting squarely. Moses was again pulled down to the merest jog to save Grace from being shut out, the heat being done in 2:55 $\frac{1}{4}$.

SUMMARY.

SEPTEMBER 19, 1888.—District trotting; for three-year olds.

L. U. Shippee's b. h. Moses S, by Hawthorne; dam, by Black Hawk—Whiting...	1	1	1
G. W. Fox's br. f. Grace Vernon, by Mt. Vernon—McDowell	2	2	2
Time—2:50; 2:50; 2:55 $\frac{1}{4}$.			

The third event of the afternoon, a special three-quarters and repeat, for \$150, with Kildare, Elwood, and Johnny Gray in, was quite as interesting as either of the others. Old Johnny Gray, looking fine drawn and imperturbable as ever, raced out the first heat in 1:16, winning by two lengths easily, Elwood, always erratic, showing a fondness for green fields by bolting to the fences at short intervals, but finishing second.

When the riders had mounted for the second heat, Mr. Shippee called them to the stand, and said: "Gentlemen, you are all old riders, and know the rules much better than I do. The people now here have paid their money to see good races, and they *shall* have them. If you do not ride those horses for all there is in them, you will be punished in such a way that you will remember it the balance of your lives." The horses were then sent from an excellent start, Elwood being ridden by Cooke from start to finish with excellent judgment, and showing the way throughout. Johnny Gray made a brilliant play for the honors, but lacked the pace, finishing second by a length, Kildare a bad third. Time, 1:16. The third heat was noticeable as showing the judgment and skill of Elwood's rider, Cooke. The horse acted badly and delayed the start, but finally got away on even terms with Johnny Gray, Kildare being retired under the rules. At the half Elwood led by a length in 0:25 $\frac{1}{2}$, and ran easily to the three-quarters, when he tried to bolt, but Cooke took him in hand, and using whip and spur vigorously, kept him moving to the wire, winning by a length only in 1:18. Cooke was loudly applauded, as he deserved to be.

SUMMARY.

SEPTEMBER 19, 1888.—Special; running; purse, \$150. Three-quarters and repeat.

Elwood, s. g., by Norfolk-Ballinette—Cooke	2	1	1
Owen Bros. g. h. Johnny Gray, by Shiloh-Margery—Howson	1	2	2
T. G. Jones' s. g. Kildare, by imp. Kyrle Daly—Mistake—Hazlett	3	3	dr.
Time—1:16; 1:16; 1:18.			

Pools: Elwood, \$24; Kildare, \$17; Johnny Gray, \$10.

Trotting, open to the district, two in three, for two-year olds, brought out two likely colts in Kilrain and J R, both sizable and of high form. Kilrain, although moving stiffly, was made favorite in the betting for a few moments, but J R was soon given the commanding place, selling for \$150 to \$20, and again for \$100 to \$8. J R had it all his own way, taking two heats without being pushed, the first in 2:33 $\frac{1}{4}$, and the second in 2:41. In the latter Kilrain barely saved distance, Dustin slowing J R to a walk.

SUMMARY.

SEPTEMBER 19, 1888.—Trotting; district; best two in three; two-year old stake.

W. Murray's br. c. J R, by Richard's Elector, he by Electioneer, dam by Meese's St. Lawrence, Jr.—Dustin	1	1
L. U. Shippee's b. c. Kilrain, by Hawthorne—March First—Whiting	2	2

Time—2:33 $\frac{1}{2}$; 2:41.

THIRD DAY.

The attendance on Thursday was noticeably better than on the two preceding days, but yet by no means so great as the excellence of the programme offered should have attracted. Four races were listed, in each of which the betting was rather light, there being a pronounced favorite in every one of the events. The track had been placed in good condition, and the sport began promptly.

Trotting, for the 2:35 class; had three starters in the first heat. Ben Ali, the favorite, trotted at Sonnet's wheel to the three quarters, she having the pole, and doing the quarter in 0:37 $\frac{1}{2}$, the half in 1:13. When straightened into the stretch, Ben Ali was given his head, and won easily in 2:25 $\frac{1}{2}$, Perihelion being distanced. Pools: Ben Ali \$60, Sonnet \$14, before the second heat, in which Ben Ali led all the way, and won in a jog, the quarter being 0:36, the half 1:11, the mile 2:26 $\frac{1}{2}$.

In the third heat Ben Ali was off his feet from the quarter, and could not be settled until the last turn was reached, when Sonnet was eight lengths to the good. Thence into the wire Ben Ali trotted fast, Sonnet winning the heat by three lengths. Time—0:36; 1:11 $\frac{1}{2}$; 2:24 $\frac{1}{2}$.

The fourth heat was a jog for Ben Ali, Sonnet breaking and losing six lengths to the quarter, saving distance only because Ben Ali was pulled down to a jog. Time—0:35 $\frac{1}{2}$; 1:11 $\frac{1}{2}$; mile 2:30 $\frac{1}{2}$.

SUMMARY.

SEPTEMBER 20, 1888.—Trotting; Pacific Coast; 2:35 class; purse, \$1,000.

J. A. Goldsmith's b. g. Ben Ali, by G. M. Patchen; dam by Sportsman—Goldsmith	1	1	2	1
Palo Alto's b. m. Sonnet, by Bentonian—Sontag Dixie—Dustin	2	2	1	2
W. S. Ray's b. h. Perihelion, by Admiral—Flora, by Black Prince—Donathan ..	dis.			

Time—2:25 $\frac{1}{2}$; 2:26 $\frac{1}{2}$; 2:24 $\frac{1}{2}$; 2:30 $\frac{1}{2}$.

Pools: Ben Ali, \$50; Sonnet, \$40; Perihelion, \$6.

For the 2:27 pacing class there were four horses listed. Goldleaf had the call in the pools before the start, and ran even higher after the first heat, no pools being sold thereafter. Goldleaf took three heats and the race with ease, never being extended, the time being 2:21, 2:22 $\frac{1}{2}$, 2:20 $\frac{1}{2}$. In the second heat Little Hope was distanced, second money going to Ned Winslow, and third to San Diego.

SUMMARY.

SEPTEMBER 20, 1888.—Pacing; Pacific Coast; 2:27 class; purse, \$500.

Pleasanton Stock Farm's ch. f. Goldleaf, by Sidney—Fernleaf—McDowell	1	1	1
L. G. McCord's b. g. Ned Winslow, by Tom Benton; dam by Dave Hill, Jr.—McCord	2	2	3
H. C. Airhart's b. g. San Diego, by Victor; dam thoroughbred—Welch	3	3	2
W. B. Bradbury's ch. g. Little Hope, by Tempest, Jr.—Willow Blue Bull—Dustin ..	dis.		

Time—2:21; 2:21 $\frac{1}{2}$; 2:20 $\frac{1}{2}$.

Pools: Goldleaf, \$40; San Diego, \$10; field, \$7.

The four-year old stake had but two starters; Steve Whipple a strong favorite over Dubec. The favorite, as in the preceding race, had everything his own way, never being hard pushed, although Dubec held his position throughout each heat from the quarter to the wire, and seemed to have a bit in reserve. In the third heat Steve Whipple broke from the start, and went half way to the quarter without recovering, Dubec opening a gap of twenty lengths. Whipple then settled and overhauled his handsome competitor, and when at the distance flag Dubec lost his feet and the heat, Whipple winning by two lengths in 2:28.

SUMMARY.

SEPTEMBER 20, 1888.—Trotting. Four-year old stake.			
C. Needham's b. s. Steve Whipple, by Chrisman's Hambletonian-Twist—Parker..	1	1	1
L. J. Rose's b. g. Dubec, by Sultan-Lady Day—Maben	2	2	2
Time—2:26; 2:23; 2:28.			

Pools: Steve Whipple, \$40; Dubec, \$13.

The Mambrino Wilkes stake; entrance \$75, with \$200 more added by Colonel Irvin Ayers, owner of the stallion. For produce of Mambrino Wilkes. This brought five handsome three-year olds to the score. The race was taken in three straight heats by Jennie Wilkes, a bay filly of fine size, form, and action. John W, a bay colt, was second in each heat, and will train on. Black Diamond persisted in galloping through the first heat.

SUMMARY.

SEPTEMBER 20, 1888.—Trotting. Mambrino Wilkes stake; \$75 entrance, \$200 added by Colonel Ayers; three-year old produce of Mambrino Wilkes; four moneys, 50, 25, 15, and 10 per cent.

W. H. Post's b. f. Jennie Wilkes, by Mambrino Wilkes—Jordan	1	1	1
J. P. Waterman's b. c. John W, by Mambrino Wilkes; dam, Guernsey mare—Hamilton	2	2	2
T. Shaw's br. c. Pedro, by Mambrino Wilkes—Parker	3	dis.	
G. Mosher's blk. g. Black Diamond, by Mambrino Wilkes—Knier	4	dis.	
A. T. Jackson's b. g. Wilkie Wilkes, by Mambrino Wilkes—Jackson	5	dis.	

Time—3:06; 3:06½; 3:03.

FOURTH DAY.

Friday was the great day of the fair in point of attendance. The business houses and public schools were closed, and especial efforts made to induce general interest, with flattering success.

The vehicles present were tallied as they left the grounds, and eleven hundred and three were counted. Presuming that three persons came in each, and estimating the crowd fairly, eight thousand would not be too high a figure.

Both stands were crowded, the stretch was filled, and the paddock was sprinkled with people. The day was warmer than Thursday, but yet not uncomfortable, and the racing began promptly. The sport was good throughout the afternoon, the leading interest, of course, being the free-for-all trot in which Stamboul, Arab, and Lot Slocum met. Many prominent horsemen visited Stockton especially to see that race, and they were rewarded by a contest as exciting as any previous meeting of the great trotters.

The first race of Friday was a half mile and repeat, with four entries. The starter had much annoyance in getting the horses off, and after the first heat it was apparent that jobbery of some sort was being attempted. Lida Ferguson was strong in the pools, but was plainly pulled and the heat

taken by Sleepy Dick in 0:49. The pools were: Lida, \$25; Sleepy Dick, \$14; field, \$6.

In the second heat the rider of Lida Ferguson pulled the mare into the fence soon after the start and stopped her, Johnny Gray reaching the wire first in 0:49½. The attempt to throw the race was so patent that the judges displaced Barton and Leonard, putting Hazlett on Sleepy Dick in place of the former, and Cook on Lida Ferguson. The heat was declared "no heat," and Caleb Leonard, the rider of Lida Ferguson, was suspended for one year.

When sent off for the next heat under the new riders, Lida Ferguson had it all her own way, and won in 50 seconds. Johnny Gray and Springwater were then sent to the stables, and Lida Ferguson and Sleepy Dick sent for the last heat; the former winning in 54 seconds easily.

SUMMARY.

SEPTEMBER 21, 1888.—Running. Half mile and repeat.

Willitt's ch. m. Lida Ferguson—Cook	2	0	1	1
Starkey's ch. g. Sleepy Dick—Hazlett	1	0	3	2
Owen Brothers' g. g. Johnny Gray, by Shiloh—Margary—Howson	4	0	2	r.o.
Lowry's blk. h. Springwater	3	0	4	r.o.

Time—0:49; 0:49½; 0:50; 0:54.

The great event of the day and of the fair was the next on the card, a free-for-all trot, with Stamboul, Arab, and Lot Slocum listed. Before the race Arab sold in the betting for \$100; field, \$30; and again, Arab, \$100; Stamboul, \$20; Lot Slocum, \$7.

The horses were tapped from a good start for the first heat, Stamboul breaking on the turn, and Arab leading to the quarter, in 0.33¾, by eight lengths. To the half Stamboul partly closed the gap, the half being done in 1:07½, but at the three quarters Stamboul again broke and lost several lengths. Maben soon straightened him out, however, and he came down the stretch very fast, finishing at Arab's wheel; the heat being done in 2:16, a quarter of a second better than Arab's best previous time. Before the second heat the pools were: Arab, \$100; field, \$13. In the second heat Stamboul held his own with Arab to the quarter in 0:33, and the pair went to the half like a span in 1:05, and in the same way to the three quarters. When rounding into the straight Stamboul broke, but soon caught his stride and fairly outtrotted Arab down the stretch, winning by a length in 2:15¾. The crowd cheered wildly, and the betting changed, Arab selling for \$55; field, \$100. The horses were sent off at the third score for the third heat; Stamboul showing the way to the quarter in 0:33, and the half by two lengths, in 1:05. To the three quarters Stamboul broke, and placed Arab by five lengths at the head of the stretch; but Mr. Rose's grand stallion would not be denied, and came so strongly that at the drawgate he was a length ahead, when Hickok began to drive and got Arab to the wire winner by a head, in 2:17½.

The crowd rushed again to the pool box, and the betting again veered, Arab selling for \$100; Stamboul, \$50. Lot Slocum withdrawn. The fourth heat was taken by Arab; the gelding leading to the quarter by a length in Arab had things his own way, and thence home jogged easily, taking the 0:35, when Stamboul broke and lost a dozen lengths. At the half in 1:08½, heat and race in 2:22½.

SUMMARY.

SEPTEMBER 21, 1888.—Trotting. Free for all.

O. A. Hickok's b. g. Arab, by Atherton—dam, Lady Hamilton—Hickok	1	2	1	1
L. J. Rose's b. s. Stamboul, by Sultan—Fleetwing—Maben	2	1	2	2
A. Gonzales' b. g. Lot Slocum, by Electioneer—dam, Glencora—Shaner	3	3	3	d.

Time—2:16; 2:15¾; 2:17½; 2:22½.

A trotting race for the 2:22 class started four fast ones—Tempest, Gus Wilkes, Alcazar, and Thapsin. In the pools tempest was sold at \$100; field, \$30; and the favorite took the first heat in 2:20½ easily.

The second heat was a surprise, being won by Gus Wilkes after a lively brush down the stretch with Tempest. Alcazar seemed out of sorts, and trotted irregularly, although Maben at intervals was able to settle him and get splendid speed from him. In the third heat Dustin and Gus Wilkes coming up behind Hickok and Tempest, locked his wheel in Hickok's. Hickok then cut Gus over the face with his whip, and after the heat Dustin claimed interference. The complaint was disallowed. The heat was hard driven throughout, Tempest and Gus Wilkes finishing closely, the former winning. The time was 0:36¼; 1:11; 2:23.

Tempest took the fourth heat, Gus Wilkes zigzagging badly, despite Dustin's skill. Time—0:35¼; 1:11; 2:24¼; Thapsin showing a good rate of going, and crowding for the heat, and finishing third. It was so near dark after the fourth heat that the judges postponed the final heat until the succeeding day.

FIFTH DAY.

Saturday was well suited to racing and trotting, being just warm and a slight breeze. The attendance was much less than on Friday, but a goodly number, perhaps four thousand, were present. The unfinished race of the preceding day was called at 12 m. and the horses sent off after repeated scoring. Tempest led from the wire, with Gus Wilkes trailing, and Thapsin shutting Wilkes in. At the three quarters it was Tempest and Gus Wilkes, and a pretty race down the stretch, Tempest getting the whip and being sent for a record, which he got at 2:19, placing another Hawthorne in the 2:20 list, Gus Wilkes second, Thapsin third, Alcazar fourth.

SUMMARY.

SEPTEMBER 22, 1888.—Trotting. 2:22 class.

L. U. Shippee's b. m. Tempest, by Hawthorne; dam not traced—Hickok	...	1	2	2	1	1
J. A. Dustin's b. g. Gus Wilkes, by Mambrino Wilkes—Fancy—Dustin	.....	4	1	1	2	2
E. H. Miller's blk. g. Thapsin, by Berlin—Lady Hubbard—Smith	.....	2	4	4	3	3
L. J. Rose's b. s. Alcazar, by Sultan—Minnehaha—Maben	.....	3	3	3	4	4

Time—2:20½; 2:23; 2:24¼; 2:19.

Second race, a stake for three-year olds, was won by Direct, the favorite over Moses S and Ben Davis. The first and second heats were very easily won, Direct being slowed to let the others save distance. In the last heat Ben Davis showed some pretensions, and pushed up so strongly that Direct was given the whip to win. The times for the heats were, first, 0:37¼; 1:13¼; 2:28¾; second, 0:35; 1:10; 2:29; third, 0:36¾; 1:14¾; 2:30.

SUMMARY.

SEPTEMBER 22, 1888.—Trotting. Three-year old stake.

Pleasanton Stock Farm's blk. c. Direct, by Director—Echora—McDowell	.....	1	1	1
L. U. Shippee's b. c. Moses S, by Hawthorne; dam by Cramer's Black Hawk—Whiting	.....	2	2	3
B. C. Holly's s. g. Ben Davis—Kenney	.....	3	3	2

Time—2:28½; 2:29; 2:30.

A running race for two-year olds was next on the card, but only Serpolette appeared and galloped a mile to save, ridden by Howson.

Third race, special pacing, with three fast entries—Yolo Maid, Goldleaf, and Almont Patchen—was awaited with high expectations, which were more

than met. The performance of Yolo Maid was phenomenal. By pacing in 2:16½, she sliced 1½ seconds from Goldleaf's three-year old pacing record. She was driven by John Goldsmith, and demonstrated that, beside having a flight of speed, she can stay. The race was the fastest ever won by a three-year old, and Goldsmith is not adverse to matching the Maid against Adonis. She paced her heats out, without a waver, and almost without turning a hair. There is lots of reserve power in her which can not but lower her record in the future. The pools before the race were, Yolo Maid, \$100; Almont Patchen, \$30; Goldleaf, \$10.

In the first heat Goldleaf piloted the string to the half in 1:10, doing the quarter in 0:35½. To the three quarters Yolo Maid took command and drew away down the stretch, winning by two lengths in 2:16½, Goldleaf second. With the pole in the second heat the Maid went to the quarter in 0:35, and half in 1:09½, Almont Patchen pacing strong and holding her almost level. Around the turn positions were the same, but when in the straight Patchen was carried off his feet, and the Maid won easily in 2:16½ as before; Patchen second, and Goldleaf along the road. The third heat from a pretty start was very fast to the half, the horses being bunched, with Yolo Maid perceptibly leading. To the quarter in 0:32¾, and the half in 1:05¼. From the half the Maid left her competitors, Goldleaf breaking on the stretch, and Patchen slowing, and won the heat and race in 2:18, the time which had previously given Goldleaf a world's record; Almont Patchen second; Goldleaf third.

SUMMARY.

SEPTEMBER 22, 1888.—Pacing. Special.

C. R. Hoppin's b. f. Yolo Maid, by Alex Button; dam by Dietz's St. Clair—Goldsmith	1	1	1
Mr. Billup's b. s. Almont Patchen, by Juanita-Glady—Sullivan	3	2	2
Pleasanton Stock Farm's ch. m. Goldleaf, by Sidney-Fernleaf, by Flaxtail—McDowell	2	3	3
<i>Time</i> —2:16½; 2:16½; 2:18.			

A \$700 purse for the 2:27 class had five starters, which sold in the pools before the race as follows: Rosie Mc, \$80; Franklin, \$30; field, \$12—Ed, Barbaro, and Ha Ha. Considerable delay in scoring made the crowd impatient, but the horses were finally sent off well, Franklin and Rosie Mc fighting to the three-quarters, doing the quarter in 0:36, and the half in 1:10. From the upper turn Franklin was in command and took the heat in 2:21, Rosie Mc second, Ha Ha third, Ed fourth, and Barbaro barely saving distance. Between heats Franklin sold for \$150; Rosie Mc, \$40; field, \$15. The second heat was like the first, the race being between Franklin and Rosie Mc to the head of the stretch, where the gelding drew away, despite the use of the whip on Rosie, and won in 2:22¾, Ha Ha third, Ed fourth, Barbaro distanced.

Before the third heat Franklin sold at \$50; field, \$12. Again Franklin and Rosa Mc trotted, span-like to the stretch, down which both horses were given the whip, Franklin winning a close heat and the race in 2:20¾; quarters, 0:36, 1:10.

SUMMARY.

SEPTEMBER 22, 1888—Trotting. Purse, \$700. 2:27 class.

Charles Davis' br. g. Franklin, by General Reno; dam, unknown—Donathan	1	1	1
G. W. Woodard's b. m. Rosie Mc, by Alex Button; dam, Rosedale—Goldsmith	2	2	2
Houser & Soule's br. s. Ha Ha, by Nephew; dam by McCracken's Black Hawk—Soule	3	3	3
A. T. Jackson's b. g. Ed, by Irwin Davis—Jackson	4	4	4
Owen Bros'. g. s. Barbaro—Wilson	5	dis.	

Time—2:22¾; 2:21; 2:20¾.

The last race of the meeting was a two-year old stake, with two starters, Margaret S and Vesolia. The pools were, Margaret S, \$40; Vesolia, \$13. Margaret took the first heat with apparent ease, the quarters being 0:37, 1:13, and the mile 2:34½, Vesolia barely saving distance. The second heat was all Margaret's way to the lower turn, she leading to the quarter in 0:37¾, the half in 1:13½. Around the lower turn Vesolia closed the gap, and in the stretch fairly outtrotted the favorite, winning by two lengths in 2:29½. The betting was mixed, Margaret S leading, however. For the third heat a good score was made, and Margaret was driven to the quarter in 0:38½, the half in 1:16½. From the half Vesolia placed herself, and won easily by two lengths in 2:32¾.

SUMMARY.

SEPTEMBER 22, 1888.—Trotting. Two-year old stake.

L. J. Rose's b. m. Vesolia, by Stamboul; Inez—Maben.....	2	1	1
Pleasanton Stock Farm's b. m. Margaret S, by Director; May Day—McDowell....	1	2	2
<i>Time</i> —2:34½; 2:29½; 2:32¾.			

LADY EQUESTRIANS, STOCK AWARDS, PAVILION EXHIBITS, ETC.

On Saturday, between heats of the 2:27 class, trotting, the equestriennes, of whom several had signified a willingness to compete, were invited to the stretch and displayed superb manege. All the ladies present were Stocktonians, and noted in society circles for fondness for equestrian exercise.

Miss Annie Smith had much the better mount, her horse being a free, easy galloper and fencer, which gave her an advantage. She sat well, jumped a hurdle with light hand, and won first.

Second was presented to little Miss Frankie Cewell, petite, of eleven years, who rode without saddle, and deserved high commendation for the grace and firmness shown. Her little black pony was stiff in a shoulder and refused to jump, but went through its paces prettily, and with its sunny faced mistress received loud plaudits.

The third award was handsomely won by Miss Edith Bailey, who might well have taken first if she had been better mounted. Her horse, while a very fine saddle animal, was by no means the equal of Miss Smith's. Miss Bailey was quite at home on the saddle, and when in jumping a bar her horse stumbled, the graceful rider displayed rare skill in retaining her seat and steadying the horse. The riding was an attractive feature of the programme.

PAVILION EXHIBIT.

Despite the strenuous efforts of Secretary La Rue, the pavilion could not be arranged before Thursday morning. Exhibitors were laggard, and many of the displays had to be fetched from Sacramento where they had been in the State Fair. On Thursday, however, everything was in order, and on that evening the exhibition was formally opened by President Shippee. An oration by General N. P. Chipman, of Tehama County, was delivered, in which a resume of the history of the industrial interests of the State during the General's long residence was made. Much statistical information of value was embodied in the address, and the conclusion reached that in agriculture and stock raising the future of California, and particularly of the central belt, promised a prosperity greater than was dreamed of by the Argonauts. General Chipman's peroration was brilliant, and elicited long continued applause, when he said:

I see in my prophetic vision your treeless plains covered with perpetual verdure, great forests of golden fruit, and wide-spreading meadows of emerald grasses; beautiful homes, surrounded with all the comforts of an advanced civilization; churches and schools everywhere; a clean, healthy, moral, happy people, a self-reliant, self-supporting, self-respecting, God-fearing people. I see along your lines of travel and among your homes charmed towns and villages, where all arts of the architect and the landscape gardener have supplemented the cultivated taste of the people, to show that these heaven-sent gifts are worthily bestowed. I see this aspiring and ambitious City of Stockton, where your products are now gathered, and where we are now assembled, a large and prosperous center of trade, holding to our metropolis the relation that the City of Philadelphia holds to the metropolis of the East. A million people in that future that rises before me will enjoy this fair land of yours, and claim it as their heritage. You and I, Mr. President, may not see this in the flesh, but the boy and girl are before me who will witness this crowning glory of this heaven-blessed land, now all our own.

The new pavilion erected by the society during the past year, at a cost of \$45,000, is commodious and an ornament to the city. It is in the form of a Greek cross, and affords much more room than was found necessary for the last show. One arm of the cross in the gallery has been finished with a floor suitable for dancing, and that portion of the building contained most of the spectators in the evenings, attracted by the music and the lovely faces and brilliant costumes of Stockton's multi-fairest, by far the most interesting portion of the show. To those unfortunates, less susceptible to the moving power of rarest beauty, attractions in the way of wagons, agricultural implements, fruits, cereals, and all the lesser items which go to make up the agricultural show, were offered. The display of vehicles was excellent, both in variety and quality. The best part of the wheeled exhibits were the carriages, Stockton being especially distinguished for the number of fine private equipages owned by its citizens and used on the good driving streets during the soft evenings almost throughout the year. The showing of fruits demonstrated that San Joaquin County can produce as fine grapes and citrus fruits as any other part of the State. Considerable unirrigated fruit was shown, which in size compared favorably with that to which water was applied, while in color and firmness it was better. The showing of handiwork by Stockton's good housewives was ample, and attested the training which the coming generation will receive. The art gallery was well filled, but the pictures could not well be studied under favorable gaslight, because the hall was used as a dancing gallery. As a whole, the pavilion showing was fairly good, and since exhibitors have learned that they can have sufficient room in a good and well situated building, it will be better in future years.

TRANSACTIONS

OF THE

THIRD DISTRICT AGRICULTURAL ASSOCIATION

For the Year 1888,

Composed of the Counties of Butte, Colusa, and Tehama.

OFFICERS OF THE ASSOCIATION.

C. C. MASON.....	President.
WILLIAM HAWKINS.....	Vice-President.
JO. D. SPROUL.....	Secretary.
JOHN R. ROBINSON	Treasurer.

DIRECTORS.

C. H. MERRILL	Willows.
W. M. BILLUPS.....	Colusa.
W. A. SHIPPEE.....	Nelson.
WM. HAWKINS.....	Chico.
D. M. REAVIS.....	Chico.
C. C. MASON.....	Chico.
T. P. HENDRICKS.....	Chico.
G. W. DORN	Chico.

REPORT.

CHICO, November 9, 1888.

To the honorable the State Board of Agriculture :

GENTLEMEN: The Directors of the Third District Agricultural Association submit this, their report of the transactions of said association, for the year ending this date.

JO. D. SPROUL, Secretary.

RECEIPTS AND EXPENDITURES.

Receipts.

Private subscriptions.....	\$2,115 00	
State aid	2,000 00	
Gate receipts at Park	1,101 00	
Gate receipts at Pavilion	525 50	
Entrance money for races.....	2,080 00	
Privileges at Park	500 00	
Killip & Co., percentage on pools	347 50	
Lumber and hay sold	35 00	
John Crouch, premium returned	15 00	
W. V. Groves, premium returned	10 00	
Sweepstake entrance	4 50	
Balance on hand from 1887.....	19 00	
		<u>\$8,752 50</u>

Expenditures.

Labor	\$291 75	
Employés at park and pavilion	380 00	
Secretary's salary	350 00	
Advertising and printing	470 25	
Postage and expressage.....	29 30	
Freight and drayage.....	12 85	
Telegraphing.....	5 82	
Music	119 00	
Subscription to National Trotting Association.....	56 00	
Hay.....	200 00	
Rent of Park.....	700 00	
Rent of Pavilion.....	150 00	
Rent of outside stalls.....	2 50	
Lumber	74 34	
Water for fair week.....	140 00	
Street sprinkling	37 50	
Livery and hack hire.....	51 50	
Cash premiums paid for live stock and pavilion exhibits.....	1,155 50	
Purses for races.....	3,739 00	
Interest on overdraft.....	16 50	
Merchandise	93 10	
Sundries	49 55	
		<u>\$8,124 46</u>
Balance on hand.....		628 04
Total.....		<u>\$8,752 50</u>

EXHIBITS AT THE FAIR—1888.

FIRST DEPARTMENT.

Name of Animal.	Owner.	Address.
CLASS I—THOROUGHbred STALLIONS.		
San Luis Obispo, three years old or over	J. H. Stephenson	Chico.
St. Leger, two years old	J. F. Holland	Chico.
CLASS II—GRADED HORSES—STALLIONS.		
Blackbird, three years old or over	D. M. Reavis	Chico.
Abdallah, one year old	D. M. Reavis	Chico.
Blackbird, Jr., one year old	D. M. Reavis	Chico.
Blackbird, with five colts	D. M. Reavis	Chico.
MARES.		
Hebe, three years old or over	A. L. Nichols	Chico.
Vic H, three years old or over	D. M. Reavis	Chico.
Ellen G, three years old or over	D. M. Reavis	Chico.
Lady Crittenden, two years old	D. M. Reavis	Chico.
Lady Gervais, two years old	D. M. Reavis	Chico.
Lady Malcolm, two years old	D. M. Reavis	Chico.
Ellen Swaggart, dam, with two colts	D. M. Reavis	Chico.
CLASS III—HORSES OF ALL WORK—STALLIONS.		
Douglas Belmont, three years old or over	W. A. Merrill	Williams.
Dunois, three years old or over	L. H. McIntosh	Chico.
Tom, three years old or over	Z. Maloche	Norman.
Rob Roy, two years old	W. O. Masses	Chico.
CLASS IV—DRAFT HORSES—STALLIONS.		
Marquis of Lorne, three years old or over	W. H. Blackford	Colusa.
Webster, three years old or over	D. M. Reavis	Chico.
Ned, one year old	R. C. Grubbs	Wyandotte.
CLASS V—ROADSTERS—STALLIONS.		
Victory, three years old or over	John Dowd	Central House.
Stranger, three years old or over	W. W. Marshal	Willows.
Munroe King, three years old or over	D. M. Reavis	Chico.
Arthur Wilkes, three years old or over	L. H. McIntosh	Chico.
GELDINGS.		
E. C. Peart	W. M. Billups	Colusa.
Frank	F. J. Tetran	Chico.
Major Mont	C. H. Merrill	Willows.
MARES.		
Nell, three years old or over	F. M. Cecil	Chico.
Bird, three years old or over	W. W. Marshal	Willows.
Jennie, three years old or over	S. H. Jackson	Chico.
Bell C, three years old or over	F. G. Crawford	Willows.
Cora M, three years old or over	G. M. Potts	Willows.
Lottie, three years old or over	L. H. McIntosh	Chico.
Lettie, three years old or over	L. H. McIntosh	Chico.
Annie E, two years old	C. H. and W. R. Merrill	Willows.
CLASS VI—CARRIAGE HORSES—SINGLE.		
Pilot	D. M. Hooper	Chico.
Bodie	F. E. Shearer	Chico.
CLASS VII—ROADSTER TEAMS—DOUBLE.		
Sylvia and Addie B.	A. L. Nichols	Chico.

FIRST DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
CLASS VIII—SADDLE HORSES.		
Dandy	H. B. Reed	Chico.
Johnny	George Burk	Chico.
CLASS IX—YEARLING HORSE COLTS.		
Abdallah	D. M. Reavis	Chico.
SUCKLING HORSE COLTS.		
Sherman	Charles Sherman	Chico.
Farwell	D. M. Reavis	Chico.
Heitzig	D. M. Reavis	Chico.
Salisbury	D. M. Reavis	Chico.
Mac	L. H. McIntosh	Chico.
SUCKLING MARE COLTS.		
—	F. M. Cecil	Chico.
Lady Caro	A. L. Nichols	Chico.
Pink	D. M. Reavis	Chico.
Daisy S.	W. O. Masses	Chico.
Lottie 2d	L. H. McIntosh	Chico.
CLASS X—SWEEPSTAKES.		
Monroe Chief, stallion of any age	D. M. Reavis	Chico.
Ellen Swaggert, mare of any age	D. M. Reavis	Chico.
CLASS XI—JACKS AND JENNIES.		
Stonewall Jackson, jack	D. M. Hooper	Chico.
Prince, jack	John Crouch	Chico.
Palermo, suckling jack	John Crouch	Chico.
Modesty, suckling jack	J. V. Flint	Chico.
Lady Flint, jenny	J. V. Flint	Chico.
Lady Irwin, jenny	John Crouch	Chico.
CLASS I—HEREFORDS—COWS.		
Heatherbell, three years old or over	D. M. Reavis	Chico.
Hyacinth, three years old or over	D. M. Reavis	Chico.
Belle of Chico 2d, two years old	D. M. Reavis	Chico.
Bell of Chico 3d, one year old	D. M. Reavis	Chico.
Bell of Chico 4th, heifer calf	D. M. Reavis	Chico.
CLASS II—ALDERNEYS, AYRSHIRES, AND JERSEYS.		
Princess of Sacramento, three years old or over	C. V. Hobart	Chico.
Princess Ethel, heifer calf	Charles Faulkner	Chico.
CLASS III—DEVONS—COWS.		
Cherry	F. W. Miller	Chico.
CLASS IV—DURHAMS AND HOLSTEINS—BULLS.		
Uriah Heep, three years old or over	J. S. Hutchins.	Central House.
Nadine Veeman, three years old or over	L. Stanford	Vina.
San Gabriel, three years old or over	L. Stanford	Vina.
Boneta Prince, one year old	L. Stanford	Vina.
Capador, one year old	L. Stanford	Vina.
Cherry Prince, one year old	D. M. Reavis	Chico.
Orsini, bull calf	L. Stanford	Vina.
Missouri Duke, bull calf	D. M. Reavis	Chico.
COWS.		
Clara Hammerton, three years old or over	L. Stanford	Vina.
Jemima, three years old or over	L. Stanford	Vina.
Morasa, two years old	L. Stanford	Vina.
Lida, two years old	L. Stanford	Vina.
Mecax, one year old	L. Stanford	Vina.
Nometa, one year old	L. Stanford	Vina.
Patino, heifer calf	L. Stanford	Vina.

TRANSACTIONS OF THE
FIRST DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
SPECIAL CLASS—POLLED ANGUS—BULLS.		
Blaine 2d, one year old.....	F. Ackerman.....	Chico.
Bull calf	F. Ackerman.....	Chico.
COWS.		
Topsy	F. Ackerman.....	Chico.
Chloe	F. Ackerman.....	Chico.
SWEEPSTAKES—HERDS.		
Nadine Veeman and four cows	L. Stanford.....	Vina.

PREMIUMS AWARDED—1888.

FIRST DEPARTMENT.

Name of Animal.	Exhibitor.	Address.	Award.
CLASS I—THOROUGHERED STALLIONS.			
San Luis Obispo, three years old or over	J. H. Stevenson	Chico	\$20 00
St. Leger, two years old	J. F. Holland	Chico	\$15 00
CLASS II—GRADED STALLIONS.			
Blackbird, three years old or over	D. M. Reavis	Chico	\$15 00
Blackbird, Jr., one year old	D. M. Reavis	Chico	\$5 00
Abdallah, one year old	D. M. Reavis	Chico	\$2 50
Blackbird and five colts	D. M. Reavis	Chico	\$15 00
MARES.			
Vic H, three years old or over	D. M. Reavis	Chico	\$10 00
Hebe, three years old or over	A. L. Nichols	Chico	\$5 00
Lady Crittenden, two years old	D. M. Reavis	Chico	\$5 00
Lady Gervais, two years old	D. M. Reavis	Chico	\$2 50
Ellen Swaggert and two colts	D. M. Reavis	Chico	\$10 00
CLASS III—HORSES OF ALL WORK—STALLIONS.			
Douglas Belmont, three years old or over	M. E. Merrill	Willows	\$10 00
Dunais, three years old or over	L. H. McIntosh	Chico	\$5 00
Rob Roy, two years old	W. O. Masses	Chico	\$5 00
CLASS IV—DRAFT STALLIONS.			
Webster, three years old or over	D. M. Reavis	Chico	\$10 00
Marquis of Lorne, three years old or over	W. H. Blackford	Colusa	\$5 00
Ned, one year old	R. G. Grubbs	Wyandotte	\$5 00
CLASS V—ROADSTER STALLIONS.			
Stranger, three years old or over	W. W. Marshall	Willows	\$15 00
Monroe King, three years old or over	D. M. Reavis	Chico	\$7 50
MARES.			
Belle C, three years old or over	F. G. Crawford	Willows	\$10 00
Bird, three years old or over	W. W. Marshall	Willows	\$5 00
Annie E, two years old	C. H. and W. R. Merrill	Willows	\$7 50
GELDINGS.			
Major Mont, four years old or over	C. H. Merrill	Willows	\$7 50
Frank, four years old or over	F. J. Tetrau	Chico	\$2 50
CLASS VI—CARRIAGE HORSES—SINGLE.			
Bodie	F. E. Shearer	Chico	\$7 50
Pilot	D. M. Hooper	Chico	\$5 00
CLASS VII—ROADSTER TEAMS.			
Sylvia and Addie B	A. L. Nichols	Chico	\$10 00
CLASS VIII—SADDLE HORSES.			
Dandy	H. B. Reed	Chico	\$5 00
CLASS IX—COLTS.			
Mac, suckling horse colt	L. H. McIntosh	Chico	\$5 00
Farwell	D. M. Reavis	Chico	\$2 50
Abdallah, yearling horse colt	D. M. Reavis	Chico	\$10 00
Lady Caro, suckling mare colt	A. L. Nichols	Chico	\$5 00
Lottie 2d	L. H. McIntosh	Chico	\$2 50

FIRST DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
CLASS X—SWEEPSTAKES.			
Monroe Chief, stallion of any age	D. M. Reavis	Chico	\$25 00
Ellen Swaggert, mare of any age	D. M. Reavis	Chico	\$20 00
CLASS XI—JACKS AND MULES—JACKS.			
Prince, two years old or over	John Crouch	Chico	\$10 00
Stonewall Jackson, two years old or over	D. M. Hooper	Chico	\$5 00
JENNIES.			
Lady Irwin	John Crouch	Chico	\$5 00
Lady Flint	J. V. Flint	Chico	\$2 50
CLASS I—HEREFORDS—COWS.			
Heatherbell, three years old or over	D. M. Reavis	Chico	\$15 00
Hyacinth, three years old or over	D. M. Reavis	Chico	\$5 00
Belle of Chico 2d, two years old	D. M. Reavis	Chico	\$10 00
Belle of Chico 3d, one year old	D. M. Reavis	Chico	\$5 00
Belle of Chico 4th, heifer calf	D. M. Reavis	Chico	\$4 00
CLASS II—ALDERNEYS, AyrSHIRES, AND JERSEYS.			
Princess, Jersey cow, three years old or over	C. V. Hobart	Chico	\$15 00
Ethel, Jersey heifer calf	C. Faulkner	Chico	\$4 00
CLASS III—DEVONS—COWS.			
Cherry, three years old or over	F. W. Miller	Chico	\$15 00
CLASS IV—DURHAMS AND HOLSTEINS—BULLS.			
—, three years old or over	Leland Stanford	Vina	\$15 00
Uriah Heep, three years old or over	J. S. Hutchings	Central House	\$5 00
Durham bull, one year old	D. M. Reavis	Chico	\$5 00
Holstein bull, one year old	Leland Stanford	Vina	\$3 00
Missouri Duke, calf	D. M. Reavis	Chico	\$2 50
COWS.			
Clara Hammerton, three y'rs old or over	Leland Stanford	Vina	\$15 00
—, three years old or over	Leland Stanford	Vina	\$5 00
—, two years old	Leland Stanford	Vina	\$10 00
—, two years old	Leland Stanford	Vina	\$5 00
—, one year old	Leland Stanford	Vina	\$5 00
—, one year old	Leland Stanford	Vina	\$3 00
Heifer calf	Leland Stanford	Vina	\$2 50
CLASS V—SPECIAL—POLLED ANGUS—BULLS.			
Blaine 2d, one year old	F. Ackerman	Chico	\$10 00
COWS.			
Topsy, two years old	F. Ackerman	Chico	\$7 50
Chloe, two years old	F. Ackerman	Chico	\$2 50
SWEEPSTAKES.			
One bull and four females	Leland Stanford	Vina	\$20 00
CLASS I—BERKSHIRES—BOARS.			
Redwood Duke 2d	B. F. Allen	Chico	\$8 00
SOWS.			
Susie	J. Hunter	Chico	\$5 00
Hopton Girl	B. F. Allen	Chico	\$3 00
CLASS II—POLAND—CHINA—BOARS.			
King	B. F. Allen	Chico	\$8 00
Pride of Butte	B. F. Allen	Chico	\$4 00
SOWS.			
Maid of Chico	B. F. Allen	Chico	\$5 00
Phyllis	B. F. Allen	Chico	\$2 50

FIRST DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
CLASS III—GRADED—SOWS.			
Five pigs under six months	B. F. Allen	Chico	\$4 00
	B. F. Allen	Chico	\$5 00
CLASS IV—PURE-BRED POULTRY.			
Pair of Duck-Wing Games	J. F. Holland	Chico	\$2 50
Pair of Games	J. F. Holland	Chico	\$2 50
Pair of Black Games	J. F. Holland	Chico	\$2 50
Pair of Bronze turkeys	J. F. Holland	Chico	\$5 00
Bronze gobbler	J. F. Holland	Chico	\$5 00
Trio of Game Bantams	J. F. Holland	Chico	\$2 50
Pair of Black Spanish	J. F. Holland	Chico	\$2 50
Exhibit of five varieties	J. F. Holland	Chico	\$7 50
Pair of Games	A. L. Nichols	Chico	\$2 50
Game cock, under one year	A. L. Nichols	Chico	\$2 50
Pair of Pile Games	M. Evans	Chico	\$2 50
Pair of Black Javas	D. M. Hooper	Chico	\$2 50
Pair of Plymouth Rocks	D. M. Hooper	Chico	\$2 50
Pair of Dominiques	C. C. Goree	Chico	\$2 50
Pair of Buff Cochins	C. C. Goree	Chico	\$2 50

SECOND DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Pulverizer	Weinstock & Lubin	Sacramento	Diploma.
Domestic sewing machine	A. F. Fisher	Chico	Diploma.
Incubator	A. F. Fisher	Chico	Diploma.
Washing machine	Finch & Holt	Chico	Diploma.
Clothes wringer (Empire)	Finch & Holt	Chico	Diploma.
Clotheshorse (California)	Finch & Holt	Chico	Diploma.
CLASS II—VEHICLES.			
Road cart	Pulliam & Hamilton	Chico	\$3 00

THIRD DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Best ten yards rag carpet	Mrs. J. Gilly	Chico	\$4 00
Second best ten yards rag carpet	Mrs. E. A. Pegden	Chico	\$2 50
Best hooked rug	Mrs. E. A. Pegden	Chico	\$3 00
Best knitted cotton socks	Mrs. L. Nye	Chico	\$1 00
Best knitted wool socks	Mrs. S. Potter	Chico	\$1 00
Best knitted bedspread	Mrs. D. M. Hooper	Chico	\$3 00
Best crochet bedspread	Mrs. Levi Smith	Gridley	\$5 00
CLASS II.			
Best ottoman cover	Mrs. C. G. Warren	Chico	\$2 00
Best table cover	Mrs. R. A. McCormack	Chico	\$2 00
Best fancy chair cushion	Mrs. C. G. Warren	Chico	\$2 00
Best crochet shawl	Miss M. Shannon	Chico	\$2 00
Best lamp stand mat	Mrs. R. McIntosh	Chico	\$1 00
Best silk embroidery	Miss M. Shannon	Chico	\$5 00
Best embroidered table cover	Miss M. Shannon	Chico	\$2 00
Best embroidered wall panel	Mrs. C. G. Warren	Chico	\$1 00
Best made and handsomest dress	Mrs. A. M. Woodruff	Chico	\$3 00

THIRD DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Best honiton and point lace	Miss Georgie Hall.	Chico	\$2 00
Best display of tidies and yokes	Miss M. Shannon.	Chico	\$2 00
Best seed frame	Mrs. L. Nye	Chico	\$1 00
Best display of hairwork	Mrs. M. Bazel	Chico	\$2 00
Best display of linen embroidery	Miss M. Shannon.	Chico	\$2 50
Best display of artificial flowers	Mrs. L. Nye	Chico	\$2 50
Best display of wax flowers	Mrs. E. A. Pegden.	Chico	\$2 50
Best display of moss work	Mrs. L. Nye	Chico	\$2 00
Best display of cone work	Mrs. L. Nye	Chico	\$2 00
Best display of shell work	Mrs. L. Nye	Chico	\$2 00
Best embroidered picture	Miss M. Shannon.	Chico	\$2 50
Best silk quilt	Mrs. Jesse Wood	Pentz	\$8 00
Best kensington painting	Miss Georgie Hall.	Chico	\$1 00
Best fire screen	Mrs. C. G. Warren.	Chico	\$2 00
Best patchwork quilt	Mrs. N. E. Batche- lor	Chico	\$3 00
Best child's afghan	Miss M. Shannon.	Chico	\$2 00
Best outline embroidery	Mrs. C. G. Warren.	Chico	\$1 00
Largest and best display of fancy articles.	Mrs. C. G. Warren.	Chico	\$5 00
Best lambrequin	Mrs. C. G. Warren.	Chico	\$2 00
Best fine lace work	Mrs. C. C. Mason.	Chico	\$2 00
Best display of grasses	Mrs. L. Nye	Chico	\$1 00
Best carriage afghan	Miss M. Shannon.	Chico	\$2 00
Best chenille embroidery	Mrs. C. G. Warren.	Chico	\$2 00
Best crazy quilt	Mrs. J. A. Watson.	Chico	\$5 00
Best worsted lounge scarf	Mrs. C. M. Bryant.	Chico	\$2 00
Best raised or plush work	Miss M. Shannon.	Chico	\$2 00
Best worsted crochet skirt	Mrs. S. Potter	Chico	\$2 00
Best table scarf	Mrs. C. G. Warren.	Chico	\$2 00
Best piano scarf	Mrs. R. A. McCor- mack	Chico	\$4 00
Best whiskbroom holder	Mrs. C. G. Warren.	Chico	\$2 00
CLASS II—SPECIAL PREMIUMS.			
Crochet bead chain	Mrs. S. Potter	Chico	\$1 00
Crochet hood	Mrs. S. Potter	Chico	\$1 00
Worsted wreath	Mrs. S. Potter	Chico	\$1 00
One hundred and sixty-five samples of crochet	Misses V. and M. Empie	Chico	\$1 00
Thirteen pieces of crochet lace	Misses V. and M. Empie	Chico	\$1 00
Seven crochet tidies	Misses V. and M. Empie	Chico	\$1 00
Spattered work	Mrs. N. E. Batche- lor	Chico	\$1 00
Child's lace dress and skirt	Mrs. J. E. Rodley	Chico	\$1 00
Feather wreath	Mrs. E. A. Pegden.	Chico	\$1 00
Outlined pillow shams	Mrs. E. A. Pegden.	Chico	\$1 00
Knit opera cape	Mrs. N. S. Rose	Chico	\$1 00
Silk embroidered tidy	Mrs. C. G. Warren.	Chico	Diploma.
Ribbon and plush work	Mrs. C. G. Warren.	Chico	\$2 00
Best display of kensington	Mrs. C. G. Warren.	Chico	\$2 50
Chenille rug	Mrs. C. M. Bryant	Chico	\$2 00
Display of knit lace	Mrs. J. W. McIn- tosh	Chico	\$2 50
Crochet lap robe	Miss G. Hall	Chico	\$2 00
Hammered brass work	Miss G. Hall	Chico	\$1 00
Crazy quilt	Mrs. L. Nye	Chico	\$2 00
Log cabin	Mrs. L. Nye	Chico	\$2 00
Artificial flower wreath	Mrs. L. Nye	Chico	\$1 00
Second best silk quilt	Mrs. R. B. Hildreth	Chico	\$2 00
Fine lace work	Mrs. H. Klingst	Chico	\$1 00
Crochet rug	Miss D. Goree	Chico	\$2 00
Crochet novelty lace	Miss M. Shannon	Chico	\$1 00
Patchwork quilt	Miss M. Shannon	Chico	\$2 00
Knitted cotton tidies	Mrs. R. McIntosh	Chico	\$2 50
Lace nightcap	Mrs. R. McIntosh	Chico	\$1 00

THIRD DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS III.			
Best exhibit of saddlery and harness.....	George Lyons.....	Chico.....	---\$10 00
Best exhibit of sewing machines.....	A. F. Fisher.....	Chico.....	} -- \$5 00
Best exhibit of musical instruments.....	A. F. Fisher.....	Chico.....	
Best exhibit of brass instruments.....	Neubarth Band.....	Chico.....	---\$10 00
Best exhibit of drugs and toilet articles.....	Deveny & Crew.....	Chico.....	---\$5 00

FOURTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Best set of double carriage harness.....	George Lyons.....	Chico.....	---\$10 00
Best set of single harness.....	George Lyons.....	Chico.....	---\$5 00
Best display of saddles and bridles.....	George Lyons.....	Chico.....	---\$2 50
Best display of farm harness.....	George Lyons.....	Chico.....	---\$10 00
CLASS II—SPECIAL.			
Display of dental work.....	J. E. Moore.....	Chico.....	Diploma.
CLASS IV.			
Best organ made in United States.....	A. F. Fisher.....	Chico.....	---\$3 00
CLASS V.			
Best center table.....	W. A. Tickner.....	Chico.....	---\$2 50
Display of furniture.....	W. A. Tickner.....	Chico.....	---\$5 00
CLASS VI.			
Best turning and lathe work.....	Sierra Lumber Co..	Chico.....	---\$3 00
Best scroll sawing.....	W. A. Tickner.....	Chico.....	---\$3 00
CLASS VIII.			
Display of toilet and washing soap.....	Capital Soap W'ks.	Sacramento.....	Diploma.
CLASS IX.			
Best collection of minerals.....	Mrs. L. Nye.....	Chico.....	---\$5 00
Best cabinet.....	Mrs. L. Nye.....	Chico.....	---\$5 00

FIFTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Best and largest variety of wheat.....	J. F. Entler.....	Chico.....	---\$5 00
Best sack of flour.....	Sunset Mills.....	Colusa.....	---\$3 00
Best sack of barley.....	J. F. Entler.....	Chico.....	---\$2 00
Best exhibit of hams.....	S. L. Skillin.....	Nimshew.....	---\$2 00
Best exhibit of bacon.....	J. F. Entler.....	Chico.....	---\$2 00
Best exhibit of lard.....	J. F. Entler.....	Chico.....	---\$2 00
Best exhibit of tobacco.....	M. V. Roe.....	Nimshew.....	---\$2 00
CLASS I—SPECIAL.			
Display of grasses.....	M. V. Roe.....	Nimshew.....	---\$0 50
Sheaf of oats.....	M. V. Roe.....	Nimshew.....	---\$0 50
Sorghum in stalk.....	M. V. Roe.....	Nimshew.....	---\$0 50
Display of parsnips.....	M. V. Roe.....	Nimshew.....	---\$0 50
Display of carrots.....	M. V. Roe.....	Nimshew.....	---\$0 50
CLASS II.			
Best half bushel red potatoes.....	S. L. Skillin.....	Nimshew.....	---\$1 00
Best six turnip beets.....	S. L. Skillin.....	Nimshew.....	---\$0 50
Best six sugar beets.....	Mrs. G. F. Jones.....	Chico.....	---\$0 50

FIFTH DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Best peck tomatoes	Mrs. G. F. Jones	Chico	\$0 50
Best six marrow squashes	Mrs. G. F. Jones	Chico	\$0 50
Best six hubbard squashes	Mrs. G. J. Jones	Chico	\$0 50
Display of egg plant	M. V. Roe	Nimshew	\$0 50
Display of beans	M. V. Roe	Nimshew	\$0 50
Six cucumbers	S. L. Skillin	Nimshew	\$0 50
CLASS III.			
Best display of cut flowers	Mrs. N. S. Rose	Chico	Diploma.
CLASS V.			
Best raised biscuit	Mrs. J. A. Watson	Chico	\$1 00
Best soda biscuit	Mrs. J. A. Watson	Chico	\$1 00
Best domestic corn bread	Mrs. H. Klingst	Chico	\$1 00
Best domestic rye bread	Miss M. Shannon	Chico	\$1 00
Best domestic wheat bread	Mrs. J. A. Watson	Chico	\$1 00
Best display of bread	Miss M. Shannon	Chico	\$3 00
Best display of butter in rolls	Mrs. J. F. Entler	Chico	\$2 00
Best yeast powder biscuits	Mrs. S. Potter	Chico	Sp. men.

SIXTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Best display of apples	W. V. Groves	Chico	\$5 00
Second best display of apples	M. V. Roe	Nimshew	\$2 50
Best twelve varieties of apples	Wm. Bonness	Chico	\$4 00
Second best twelve varieties of apples	S. L. Skillin	Nimshew	\$2 00
Best six varieties of apples	Wm. Bonness	Chico	\$2 00
Second best six varieties of apples	T. J. Wood	Pentz	\$1 00
Best three varieties of apples	Wm. Bonness	Chico	\$0 50
Best display of pears	B. F. Allen	Chico	\$5 00
Second best display of pears	Wm. Bonness	Chico	\$2 50
Best twelve varieties of pears	B. F. Allen	Chico	\$4 00
Best six varieties of pears	Wm. Bonness	Chico	\$2 00
Second best six varieties of pears	B. F. Allen	Chico	\$1 00
Best three varieties of pears	B. F. Allen	Chico	\$0 50
Best display of peaches	Wm. Bonness	Chico	\$5 00
Second best display of peaches	S. L. Skillin	Nimshew	\$2 50
Best six varieties of peaches	S. L. Skillin	Nimshew	\$3 50
Best one variety of peaches	T. J. Wood	Pentz	\$1 00
Best display of plums	S. L. Skillin	Nimshew	\$2 00
Best five varieties of plums	S. L. Skillin	Nimshew	\$1 00
Best one variety of plums	T. J. Wood	Pentz	\$0 50
Best display of pomegranates	W. V. Groves	Chico	\$2 00
Best display of nectarines	E. T. Reynolds	Chico	\$2 00
Best display of green figs	T. J. Wood	Pentz	\$2 00
Best display of oranges	T. J. Wood	Pentz	\$2 50
Best display of fruit by producer	M. V. Roe	Nimshew	\$10 00
Best display of gooseberries	W. Chalmers	Chico	\$2 00
Best display of quinces	W. V. Groves	Chico	\$2 00
Best display of persimmons	W. V. Groves	Chico	\$2 00
CLASS II.			
Best ten pounds of honey	J. F. Entler	Chico	\$2 00
Best display of fruit in jars	Mrs. B. F. Allen	Chico	\$5 00
Best three jars of raspberry jelly	Mrs. B. F. Allen	Chico	\$2 00
Best three jars of red currant jelly	Mrs. B. F. Allen	Chico	\$2 00
Best three jars of black currant jelly	Mrs. B. F. Allen	Chico	\$2 00
Best three jars of blackberry jelly	Miss Alice Wood	Chico	\$2 00
Best three jars of strawberry jelly	Mrs. N. E. Batchelor	Chico	\$2 00
Best three jars of quince jelly	Mrs. B. F. Allen	Chico	\$2 00
Best blackberry jam	S. L. Skillin	Nimshew	\$2 00
Best raspberry jam	Miss Alice Wood	Pentz	\$2 00

SIXTH DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Best display of preserves in glass	Mrs. N. E. Batchelor	Chico	\$5 00
Best display of pickles	M. V. Roe	Nimshew	\$2 50
Best brandied peaches	Mrs. B. F. Allen	Chico	\$2 50
Sample jar of gooseberries	Mrs. S. Potter	Chico	\$1 00
Sample jar of apple sauce	Mrs. S. Potter	Chico	\$1 00
Sample jar of yellow tomatoes	Mrs. S. Potter	Chico	\$1 00
Three jars of quince preserves	Mrs. N. E. Batchelor	Chico	\$1 00
Three jars of currants	Mrs. N. S. Rose	Chico	\$1 00
Two jars of tomato preserves	Mrs. N. S. Rose	Chico	\$1 00
Three jars of currant jam	Mrs. N. S. Rose	Chico	\$1 00
Three jars of apricot jam	Mrs. N. S. Rose	Chico	\$1 00
Three jars of white fig jam	Mrs. N. S. Rose	Chico	\$1 00
Three jars of mixed pickles	Mrs. N. S. Rose	Chico	\$1 00
Three jars of mustard pickles	Mrs. N. S. Rose	Chico	\$1 00
Three jars of chow chow	Mrs. N. S. Rose	Chico	\$1 00
Three jars of Chile sauce	Mrs. N. S. Rose	Chico	\$0 50
Display of canned fruit	M. V. Roe	Nimshew	\$0 50
Three jars of plum jelly	S. L. Skillin	Nimshew	\$1 00
Second best display of fruit in glass	T. J. Wood	Pentz	\$1 00
Three jars of crabapple jelly	Miss A. Wood	Pentz	\$1 00

CLASS III.

Best twenty-five pounds of dried apples	S. L. Skillin	Nimshew	\$2 00
Best twenty-five pounds of dried pears	S. L. Skillin	Nimshew	\$2 00
Best twenty-five pounds of dried peaches	T. J. Wood	Pentz	\$2 00
Best twenty-five pounds of dried plums	S. L. Skillin	Nimshew	\$2 00
Best ten pounds of nectarines	T. J. Wood	Pentz	\$2 00
Best ten pounds of prunes	T. J. Wood	Pentz	\$2 00
Best one half peck of English walnuts	W. V. Groves	Chico	\$2 00
Best one half peck of soft shelled almonds	T. J. Wood	Pentz	\$2 00
Best two bushels of peanuts	M. V. Roe	Nimshew	\$2 00
Best display of raisins	M. V. Roe	Nimshew	\$5 00
Best twelve varieties of table grapes	W. V. Groves	Chico	\$5 00
Best six varieties of table grapes	T. J. Wood	Pentz	\$2 00
Best three varieties of table grapes	T. J. Wood	Pentz	\$1 00
Best variety of raisin grapes	W. V. Groves	Chico	\$3 00
Best display of sweet cider	S. L. Skillin	Nimshew	\$2 50
Best display of hard cider	S. L. Skillin	Nimshew	\$2 50
Best display of walnuts	M. V. Roe	Nimshew	\$1 00
Best display of canned fruit	T. J. Wood	Pentz	\$10 00
Best display of cider vinegar	W. V. Groves	Chico	\$2 50

SPECIAL PREMIUMS.

Best display of fruits, vegetables, grains, grasses, etc.	M. V. Roe	Nimshew	\$15 00
General display of fruit and canned goods	T. J. Wood	Pentz	\$10 00
General display of fruit	Wm. Bonness	Chico	\$10 00
General display of fruits, vegetables, meats, jellies, etc.	S. L. Skillin	Nimshew	\$10 00
General display of fruits and grapes	W. V. Groves	Chico	\$10 00
General display of fruits and vegetables	B. F. Allen	Chico	\$10 00
Display of grapes	M. Azuvedo	Orland	Spec. pre.

SEVENTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Best oil painting	Miss H. E. Wood	Pentz	\$5 00
Second best	Miss Alice Crum	Chico	\$3 00
Best oil painting portraiture	Miss H. E. Wood	Pentz	\$5 00
Best oil painting on textile fabric	Mrs. J. Shannon	Chico	\$2 50
Best collection of paintings	Miss Alice Crum	Chico	\$5 00
Best display of barbertine work	Miss Hazel Wood	Pentz	\$5 00
Best display of flower paintings	Mrs. F. A. Crum	Chico	\$5 00
Best display of McCardno paintings	Miss G. Hall	Chico	Diploma.

SEVENTH DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS II.			
Best crayon drawing.....	Miss G. Hall	Chico	\$2 00
CLASS III.			
Best copy of oil painting.....	Miss G. Allen	Chico	\$1 00
Collection of oil paintings (special prem.)	Miss A. Swearingen	Chico	\$5 00
CLASS IV.			
Best collection of photographs.....	D. H. Woods.....	Chico	\$5 00
Best photographs	D. H. Woods.....	Chico	\$3 00

SPEED PROGRAMME.

TUESDAY, AUGUST 21, 1888.

RACE NO. 1—TROTTING.

For two-year olds owned in the district. Purse, two hundred dollars. Mile heats; best two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Annie E, by Tilton Almont	W. R. & C. H. Merrill ..	 Willows.
Tart, by Tilton Almont	W. M. Billups	 Colusa.

SUMMARY.

Annie E.	1	1
Tart	2	2

Time—3:00½; 3:00½.

RACE NO. 2—TROTTING.

3:00 Class. Purse, three hundred dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Patchwork, by Brigadier	C. Raisch	 Marysville.
Altena, by Altamont	L. Swan	 Yreka.
Bell C, by Tilton Almont	F. G. Crawford	 Willows.
Blockade, sire unknown	M. Biggs, Jr.	 Biggs.
Surgeon, by Brigadier	N. S. Hamlin	 Marysville.
Daisy, sire unknown	D. E. Knight	 Marysville.

SUMMARY.

Blockade	1	1	1
Altena	2	2	3
Bell C	3	3	2
Patchwork	dis.		
Surgeon	dis.		
Daisy	dis.		

Time—2:33¼; 2:36½; 2:42.

RACE NO. 3—TROTTING.

For a special purse for named horses. Purse, three hundred dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Jim L, by Dan Voorhies	C. Rodriguez	 Watsonville.
Argent, by Sterling	R. H. Walton	 San José.
Eros, by Electioneer	W. H. Vioget	 San José.
Sunflower, by Elmo	G. Baylis	 Mayfield.

SUMMARY.

Sunflower	2	1	2	1	1
Jim L	1	2	1	2	2
Argent	4	4	3	3	3
Eros	3	3	dr.		

Time—2:32; 2:28; 2:30; 2:30; 2:29.

WEDNESDAY, AUGUST 22, 1888.

RACE NO. 4—TROTTING.

For three-year olds owned in the district. Purse, three hundred dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Strathaway, sire unknown	H. H. Helman	 Visalia.
W W, by Tilton Almont	L. P. Tooley	 Willows.
Langmont, by Tilton Almont	W. M. Billups	 Colusa.
Stranger, by Tilton Almont	W. W. Marshal	 Willows.

SUMMARY.

Strathaway	4	2	1	1	1
Stranger	2	3	2	2	2
W W	1	1	3	dis.	
Langmont	3	dis.			

Time—2:42½; 2:47; 2:47¾; 2:35¾; 3:00.

RACE NO. 5—TROTTING.

2:40 Class. Purse, four hundred dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Blockade, sire unknown	M. Biggs, Jr.	 Biggs.
Lohengrin, by Echo	J. W. Dowell	 Marysville.
Daisy, sire unknown	D. E. Knight	 Marysville.
Maxwell, by Plumas	W. Garrett	 Chico.
Bird, by Tilton Almont	W. W. Marshall	 Willows.
Millboy, by Brigadier	J. B. McDonald	 Marysville.

SUMMARY.

Lohengrin	1	1	1
Bird	3	2	2
Blockade	2	4	4
Maxwell	4	3	3
Daisy	5	5	5
Millboy	dis.		

Time—2:35; 2:37; 2:36.

THURSDAY, AUGUST 23, 1888.

RACE No. 6—RUNNING.

Purse, one hundred and fifty dollars. Half mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
J M R, by Kelpie.....	J. M. Woodburn.....	Sacramento.
Adonis, by Joe Hooker.....	S. C. Tryon.....	Sacramento.
San Luis Obispo, by St. Louis.....	J. H. Stevenson.....	Chico.
Two-year old colt, by Three Cheers.....	William Murry.....	Sacramento.
Sagebrush Sam, sire unknown.....	C. Crawford.....	Chico.
Nettie Moak, sire unknown.....	J. F. Holland.....	Chico.

SUMMARY.

J M R.....	2 1 1
Two-year old colt.....	1 2 2
San Luis Obispo.....	3 3 3
Nettie Moak.....	4 dis.
Adonis.....	dis.
Sagebrush Sam.....	dis.

Time—0:49; 0:48 $\frac{3}{4}$; 0:50.

RACE No. 7—PACING.

Free for all. Purse, five hundred dollars. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Almont Patchen, by Juaniton.....	W. M. Billups.....	Colusa.
Elwood, by Richmond.....	C. A. Durfee.....	Los Angeles.
Bracelet, by Nephew.....	J. R. Hodson.....	Sacramento.
Pocahontas, by Washington.....	S. C. Tryon.....	Sacramento.

SUMMARY.

Almont Patchen.....	1 2 2 1 2 1
Elwood.....	2 1 1 3 3 3
Pocahontas.....	4 4 3 2 1 2
Bracelet.....	3 3 4 4 4

Time—2:22 $\frac{1}{2}$; 2:22 $\frac{1}{2}$; 2:24; 2:27; 2:28; 2:30.

FRIDAY, AUGUST 24, 1888.

RACE No. 8—RUNNING.

Purse, two hundred and fifty dollars. Three quarters of a mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Perigrine, by Joe Hooker.....	William Murry.....	Sacramento.
Adonis, by Joe Hooker.....	S. C. Tryon.....	Sacramento.

SUMMARY.

Perigrine.....	1
Adonis.....	dis.

Time—1:16 $\frac{3}{4}$.

RACE No. 9—TROTTING.

2:27 Class. Purse, six hundred dollars. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Wallace G, by Plumas	P. Garrett	Chico.
Jim L, by Dan Voorhies	Jas. Linscott	Watsonville.
Hazel Kirke, by Brigadier	J. B. McDonald	Marysville.
Eros, by Electioneer	W. H. Vioget	San José.
Ha Ha, by Nephew	Houser & Soule	Stockton.
Victor, by Echo	G. A. Doherty	Crescent Mills.
Ed, by Erwin Davis	A. F. Jackson	Stockton.
Artist, by Goldust	J. R. Hodson	Sacramento.

SUMMARY.

Victor	1	1	1
Ha Ha	2	2	5
Wallace G.	4	4	2
Artist	3	3	3
Ed	5	6	4
Jim L	6	5	6
Eros	7	dr.	
Hazel Kirke		dis.	

Time—2:25; 2:25; 2:26.

SATURDAY, AUGUST 25, 1888.

RACE No. 10—RUNNING.

Purse, two hundred dollars. One mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Adonis, by Joe Hooker	S. C. Tryon	Sacramento.
Nettie Moak, sire unknown	J. F. Holland	Chico.
Perigrine, by Joe Hooker	Wm. Murry	Sacramento.
J M R, by Kelpie	J. M. Woodburn	Sacramento.

SUMMARY.

Perigrine	1
J M R	2
Adonis	3
Nettie Moak	4

Time—1:47.

RACE No. 11—TROTTING.

2:33 Class. Purse, four hundred dollars. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Emma Temple, by Jackson Temple	H. H. Helman	Fresno.
Sunflower, by Elmo	W. H. Seale	Mayfield.
Argent, by Sterling	R. H. Walton	San José.
Don Tomas, by Del Sur	C. A. Durfee	Los Angeles.

SUMMARY.

Don Tomas	1	1	1
Emma Temple	3	2	2
Sunflower	2	3	3
Argent	4	4	4

Time—2:28; 2:29; 2:28.

RACE No. 12—TROTTING.

For four-year olds and under owned in the district. Purse, four hundred dollars.
Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
E C Peart, by Tilton Almont.....	W. M. Billups	Colusa.
Altena, by Altamont.....	L. Swan.....	Yreka.

SUMMARY.

Altena	1	1	1
E C Peart	2	2	2

Time—2:43½; 2:42; 2:45.

TRANSACTIONS

OF THE

FOURTH DISTRICT AGRICULTURAL ASSOCIATION

For the Year 1888,

Composed of the Counties of Sonoma and Marin.

OFFICERS OF THE ASSOCIATION.

JOSIAH H. WHITE.....	President.
W. E. COX.....	Secretary.
LEE ELLSWORTH.....	Treasurer.

DIRECTORS.

J. H. WHITE.....	Lakeville.
F. C. DeLONG.....	Novato.
H. MEACHAM.....	Stony Point.
A. P. OVERTON.....	Santa Rosa.
WM. ZARTMAN.....	Petaluma.
P. J. SHAFTER.....	Olema.
J. H. DRUMMOND.....	Glen Ellen.

REPORT.

PETALUMA, December 1, 1888.

To the honorable the State Board of Agriculture:

GENTLEMEN: The Directors of the Fourth District Agricultural Association submit this, their report of the transactions of said association, for the year ending this date.

W. E. COX, Secretary.

RECEIPTS AND EXPENDITURES.

Receipts.

From entrance fees	\$4,171 50	
From sale of tickets	3,004 95	
From privileges	2,842 10	
From State appropriation	2,500 00	
From grand stand	1,214 85	
From membership	450 00	
From sale of hay	327 83	
From subscriptions	102 50	
From police	60 00	
From special premiums	45 00	
From fines refunded	35 00	
Overdraft December 1, 1888		\$14,753 73
		6,192 30
		<u>\$20,946 03</u>

Expenditures.

Overdraft of December 1, 1887		\$5,678 23
Paid purses	\$7,950 00	
General expenses	3,682 80	
Improvements	2,380 55	
Premiums	1,989 50	
Entrance refunded	150 00	
Warrant No. 570, of 1887	23 50	
Warrant No. 18, of 1887	1 50	
Warrant No. 42, of 1887	1 50	
		<u>\$16,179 35</u>

Less warrants of 1888, paid:

No. 37	\$345 00	
No. 54	223 35	
No. 80	5 00	
No. 99	1 00	
No. 103	2 00	
No. 112	1 00	
No. 119	1 00	
No. 129	2 00	
No. 165	2 00	
No. 169	210 00	
No. 170	1 00	
No. 173	4 00	
No. 193	38	
No. 209	8 65	
No. 210	3 00	
No. 234	52 17	
No. 240	20 00	
No. 244	30 00	
		<u>\$911 55</u>
		\$15,267 80
		<u>\$20,946 03</u>

EXHIBITS AT THE FAIR—1888.

FIRST DEPARTMENT.

Name of Animal.	Owner.	Address.
CLASS I—THOROUGHBRED HORSES— STALLIONS.		
Three Cheers, four years old or over	T. G. Jones	Santa Rosa.
Sid, three years old	B. C. Holly	Vallejo.
Young Prince, two years old	T. G. Jones	Santa Rosa.
Wild Oats, two years old	W. L. Appleby	Santa Clara.
MARES.		
Laura Gardner, four years old or over	W. L. Appleby	Santa Clara.
Notidle, four years old or over	W. L. Appleby	Santa Clara.
Carmen, three years old	W. L. Appleby	Santa Clara.
Nancy, three years old	B. C. Holly	Vallejo.
Futurity, two years old	W. L. Appleby	Santa Clara.
Lady Helen, one year old	W. L. Appleby	Santa Clara.
CLASS II—STANDARD TROTTERS—STALLIONS.		
Rustic Boy, four years old or over	P. J. Shafter	Olema.
McPherson, four years old or over	J. R. Rose	Lakeville.
McGregor, four years old or over	J. Fritsch	Petaluma.
Dan Voorhees, Jr., four years old or over	J. Morrow	Petaluma.
Alcona, Jr., four years old or over	J. P. Rodehaver	Petaluma.
Rafael, four years old or over	A. W. Foster	San Rafael.
Edward Waverly, four years old or over	A. W. Burbanks	Lakeport.
Woodnut, four years old or over	B. C. Holly	Vallejo.
Adventurer, four years old or over	B. E. Harris	San Francisco.
Silas Skinner, three years old	J. P. Rodehaver	Petaluma.
Director, Jr., three years old	J. H. White	Lakeville.
Storm, two years old	B. E. Harris	San Francisco.
MARES.		
Debonaire, four years old or over	J. Loranger	Petaluma.
Fearless, four years old or over	B. E. Harris	San Francisco.
Rosie, one year old	S. Sperry	Petaluma.
Lorena	B. E. Harris	San Francisco.
CLASS III—ROADSTERS—STALLIONS.		
Rustic, four years old or over	P. J. Shafter	Olema.
Hernani, four years old or over	J. H. White	Lakeville.
Whalebone, four years old or over	H. B. Hasbrouck	Petaluma.
Antevenio, one year old	P. J. Shafter	Olema.
Joe, one year old	J. H. White	Lakeville.
MARES.		
Minnie, four years old or over	J. R. Rose	Lakeville.
Katie Almont, four years old or over	J. H. White	Lakeville.
Annie, four years old or over	J. H. White	Lakeville.
Miss Cole, four years old or over	J. H. White	Lakeville.
Leila, four years old or over	Mrs. W. D. Bliss	Petaluma.
Lena Boules, four years old or over	B. E. Harris	San Francisco.
Kate H, four years old or over	F. T. Maynard	Petaluma.
Alice D, three years old	J. H. White	Lakeville.
Princess, three years old	J. H. White	Lakeville.
Henrietta D, two years old	J. H. White	Lakeville.
Mountain Quail, two years old	J. H. White	Lakeville.
Lizzie, two years old	T. Pare	Petaluma.
Dot, one year old	J. H. White	Lakeville.
—, mare colt under one year	J. H. White	Lakeville.
—, mare colt under one year	J. H. White	Lakeville.
Ito, mare and colt under one year	B. E. Harris	San Francisco.
Hernani, stallion, with five colts	J. H. White	Lakeville.

FIRST DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
CLASS IV—CARRIAGE, SADDLE, AND GENTLEMEN'S ROADSTERS.		
Tom and Jerry, carriage team	J. T. Smith	Petaluma.
Harry and Edna, roadsters	B. E. Harris	San Francisco.
Viking, buggy horse	P. J. Shafter	Olema.
Cornet, buggy horse	J. R. Rose	Lakeville.
Hugo, buggy horse	J. H. White	Lakeville.
Brightwood, buggy horse	J. A. Davis	Petaluma.
Bay Johnnie, saddle horse	F. Roberts	Petaluma.
Jack, saddle horse	M. D. Hopkins	Petaluma.
Bruce, saddle horse	B. E. Harris	San Francisco.
Scott, saddle horse	B. E. Harris	San Francisco.
CLASS V—NORMANS AND OTHER FRENCH DRAFT BREEDS—STALLIONS.		
Hercules, four years old or over	T. Skillman	Petaluma.
Beaufort, four years old or over	J. P. Rodehaver	Petaluma.
Atilla, three years old	H. Wilsey	Petaluma.
Durand, two years old	H. Wilsey	Petaluma.
De Chartre, two years old	L. A. Devota	Novato.
John L, colt under one year	J. P. Rodehaver	Petaluma.
Right Sort, colt under one year	P. Hennelly	Petaluma.
MARES.		
Maud, four years old or over	Robert Crane	Santa Rosa.
Dolly, four years old or over	H. Gibbs	Petaluma.
Queen of the Valley, four years old or over	P. Hennelly	Petaluma.
Annie, four years old or over	W. K. Hill	Petaluma.
Lady, four years old or over	W. K. Hill	Petaluma.
Maggie, two years old	Lidia Helman	Petaluma.
Black Bess, two years old	W. K. Hill	Petaluma.
Queen P, colt under one year	Robert Crane	Santa Rosa.
Beaufort, stallion, with five colts	J. P. Rodehaver	Petaluma.
CLASS VI—CLYDESDALE AND OTHER ENGLISH DRAFT BREEDS—STALLIONS.		
Captain Sifton, four years old or over	J. Fritsch	Petaluma.
Morning Star, four years old or over	Clydesdale Breeders' Ass'n.	Petaluma.
Prince of Wales, three years old	H. E. Chapman	Petaluma.
Pointsman, Jr., three years old	F. Roberts	Petaluma.
Alexander Pointsman, two years old	P. Hennelly	Petaluma.
Lord McDuff, two years old	H. Wilsey	Petaluma.
Gladstone, two years old	H. E. Chapman	Petaluma.
Buffalo Bill, two years old	Denman & McNear	Petaluma.
—, two years old	Denman & McNear	Petaluma.
—, two years old	Denman & McNear	Petaluma.
Gray Point, two years old	J. A. McNear	Petaluma.
Whiskers, two years old	W. Page	Penn's Grove.
Robert Burns, one year old	R. H. Crane	Petaluma.
Scotty, one year old	R. H. Crane	Petaluma.
Pointsman, Jr., one year old	Denman & McNear	Petaluma.
Fingermark, under one year	Robert Crane	Santa Rosa.
Pointsman 2d, under one year	H. Gibbs	Petaluma.
Crescent, under one year	E. R. Charles	Petaluma.
MARES.		
Dolly, four years old or over	Robert Crane	Santa Rosa.
Maid of the Mist, four years old or over	Denman & McNear	Petaluma.
Blossom 2d, four years old or over	Denman & McNear	Petaluma.
Annie, three years old	R. H. Crane	Petaluma.
Nelly Clyde, three years old	P. Hennelly	Petaluma.
Annie Bell, two years old	R. H. Crane	Petaluma.
Queen, two years old	H. E. Chapman	Petaluma.
Belle, two years old	Denman & McNear	Petaluma.
Kate Clyde, one year old	P. Hennelly	Petaluma.
Maid 2d, under one year	Denman & McNear	Petaluma.
Blossom 3d, under one year	Denman & McNear	Petaluma.
Morning Star, stallion, with five colts	Clydesdale Breeders' Ass'n.	Petaluma.

FIRST DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
CLASS VII—GENERAL PURPOSES—STALLIONS.		
Prince of Marin, three years old or over	P. J. Shafter	Olema.
Gallion, three years old or over	T. Skillman	Petaluma.
Vindicator, three years old or over	T. Skillman	Petaluma.
Cantilet, three years old or over	T. Skillman	Petaluma.
Duke De Chartres, Jr., three years old or over	H. E. Chapman	Petaluma.
Mark Twain, three years old or over	J. M. Zane	Glen Ellen.
Crane's Hambletonian, three years old or over	Robert Crane	Santa Rosa.
Pointer, one year old	R. H. Crane	Petaluma.
Alice, under one year	R. H. Crane	Petaluma.
MARES.		
Minnie D, three years old or over	Robert Crane	Santa Rosa.
Kate, three years old or over	H. E. Chapman	Petaluma.
Fanny, three years old or over	H. E. Chapman	Petaluma.
Susie, three years old or over	F. Roberts	Petaluma.
Nellie, under one year	H. E. Chapman	Petaluma.

SECOND DEPARTMENT.

Name of Animal.	Owner.	Address.
CLASS IX—SHORT HORNS—BULLS.		
Sonoma Chief, three years old or over	John Lynch	Petaluma.
Duke, three years old or over	I. R. Jewell	Petaluma.
Mugwump, three years old or over	Wilfred Page	Penn's Grove.
Brindlebane, two years old	R. H. Crane	Petaluma.
Protector, two years old	Wilfred Page	Penn's Grove.
Rogue, two years old	Wilfred Page	Penn's Grove.
Hopkins, one year old	Robert Crane	Santa Rosa.
Little Pat, Jr., one year old	John Lynch	Petaluma.
Holdfast, one year old	Wilfred Page	Penn's Grove.
Belt, one year old	Wilfred Page	Penn's Grove.
The Parson, one year old	Wilfred Page	Penn's Grove.
Cheeseit, one year old	Wilfred Page	Penn's Grove.
Sonberry, one year old	Wilfred Page	Penn's Grove.
Princess, one year old	Wilfred Page	Penn's Grove.
Cherry Richardson, under one year	John Lynch	Petaluma.
Gilt Edge, under one year	Wilfred Page	Penn's Grove.
Pickrell, under one year	Wilfred Page	Penn's Grove.
To-morrow, under one year	Wilfred Page	Penn's Grove.
COWS.		
Maita, three years old or over	Wilfred Page	Penn's Grove.
Belle Medico, three years old or over	Wilfred Page	Penn's Grove.
Henrietta Page, three years old or over	Wilfred Page	Penn's Grove.
Belle Strawberry, three years old or over	Wilfred Page	Penn's Grove.
Nymph, three years old or over	John Lynch	Petaluma.
Christmas Eve, two years old	Wilfred Page	Penn's Grove.
Enriquita, two years old	Wilfred Page	Penn's Grove.
Maud 4th, one year old	R. H. Crane	Petaluma.
Belle of the Oaks, one year old	Wilfred Page	Penn's Grove.
Goldnut, one year old	Wilfred Page	Penn's Grove.
Zulieka, one year old	Wilfred Page	Penn's Grove.
Triannela, under one year	Wilfred Page	Penn's Grove.
Sweet Milk, under one year	Wilfred Page	Penn's Grove.
CLASS X—HERDS AND SWEEPSTAKES.		
Mugwump, bull two years old or over, and family	Wilfred Page	Penn's Grove.
Mugwump, bull of any age	Wilfred Page	Penn's Grove.
Holdfast, bull of any age	Wilfred Page	Penn's Grove.
Maita, cow of any age	Wilfred Page	Penn's Grove.

SECOND DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
CLASS XIX—HOLSTEINS—BULLS.		
Oro Blanco, three years old or over.....	J. H. White	Lakeville.
Diamond Dick, two years old	E. Steiger	Sonoma.
Juneau, two years old	J. H. White	Lakeville.
Huachuca, two years old	J. H. White	Lakeville.
Halbert, one year old	J. H. White	Lakeville.
Laredo, one year old	J. H. White	Lakeville.
Leandro, one year old	J. H. White	Lakeville.
Montecito, under one year	J. H. White	Lakeville.
Lorenzo, under one year	J. H. White	Lakeville.
Deming, under one year	J. H. White	Lakeville.
Jesse James, under one year	A. L. Guerne	Glen Ellen.
COWS.		
Annemie, three years old or over.....	J. H. White	Lakeville.
Winfredala, three years old or over.....	J. H. White	Lakeville.
Hoffmung, three years old or over.....	J. H. White	Lakeville.
Dagodine, three years old or over.....	J. H. White	Lakeville.
Wayward, three years old or over.....	J. H. White	Lakeville.
Annot Lyle, three years old or over.....	J. H. White	Lakeville.
Lupine, three years old or over.....	J. H. White	Lakeville.
Darkness, three years old or over.....	J. H. White	Lakeville.
Alvina, three years old or over.....	A. L. Guerne	Glen Ellen.
Lasquite, two years old	J. H. White	Lakeville.
Etchetah, two years old	J. H. White	Lakeville.
Brinhilda, one year old	J. H. White	Lakeville.
Caliente, one year old	J. H. White	Lakeville.
Minnie Wayward, one year old	J. H. White	Lakeville.
Eudora, under one year	J. H. White	Lakeville.
Chapala, under one year	J. H. White	Lakeville.
Willomina, under one year	J. H. White	Lakeville.
CLASS XX—HERD AND SWEEPSTAKES.		
Oro Blanco, bull two years old or over; Annemie, cow three years old; Annot Lyle, cow three years old; Etchetah, cow two years old; Brinhilda, cow one year old; Eudora, heifer calf under one year.	J. H. White	Lakeville.
Juneau, bull two years old or over; Win- fredala, cow three years old; Wayward, cow three years old; Lasquit, cow two years old; Caliente, cow one year old; Chapala, heifer calf under one year.	J. H. White	Lakeville.
Oro Blanco, bull of any age	J. H. White	Lakeville.
Juneau, bull of any age	J. H. White	Lakeville.
Huachuca, bull of any age	J. H. White	Lakeville.
Annemie, cow of any age	J. H. White	Lakeville.
Winfredala, cow of any age	J. H. White	Lakeville.
Wayward, cow of any age	J. H. White	Lakeville.
Lasquit, cow of any age	J. H. White	Lakeville.
CLASS XXI—JERSEYS AND GUERNSEYS— BULLS.		
Wildflower, three years old or over.....	Hall Brothers	Petaluma.
Pert, three years old or over	D. S. Dickson	Petaluma.
Essex, one year old	P. L. McGill	Sonoma.
Sonoma Chief, calf under one year	P. L. McGill	Sonoma.
Jack, calf under one year	P. L. McGill	Sonoma.
COWS.		
Juanita, three years old or over.....	P. L. McGill	Sonoma.
Sonoma, three years old or over.....	P. L. McGill	Sonoma.
Gazelle, two years old	Hall Brothers	Petaluma.
Adaline, two years old	P. L. McGill	Sonoma.
Eveline, two years old	P. L. McGill	Sonoma.
Pansy, one year old	Hall Brothers	Petaluma.
Etta, one year old	P. L. McGill	Sonoma.
Silverleaf, heifer calf under one year ..	Hall Brothers	Petaluma.
Dot, heifer calf under one year	P. L. McGill	Sonoma.

SECOND DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
CLASS XXII—HERD AND SWEEPSTAKES.		
Wildwood, bull of any age.....	Hall Brothers.....	Petaluma.
Essex, bull of any age.....	P. L. McGill.....	Sonoma.
Gazelle, cow of any age.....	Hall Brothers.....	Petaluma.
Juanita, cow of any age.....	P. L. McGill.....	Sonoma.
Sonoma, cow of any age.....	P. L. McGill.....	Sonoma.
Eveline, cow of any age.....	P. L. McGill.....	Sonoma.
CLASS XXIII—AYRSHIRES—BULLS.		
Lord Faxonia, two years old.....	George Bement.....	San Pablo.
Red Mikado, one year old.....	George Bement.....	San Pablo.
Hotspur, one year old.....	George Bement.....	San Pablo.
Express, calf under one year.....	George Bement.....	San Pablo.
COWS.		
Marion, three years old or over.....	George Bement.....	San Pablo.
Sybilla, three years old or over.....	George Bement.....	San Pablo.
Ethelberta, two years old.....	George Bement.....	San Pablo.
Faxonia, one year old.....	George Bement.....	San Pablo.
Highland Beauty, heifer calf under one year.....	George Bement.....	San Pablo.
CLASS XXIV—HERD AND SWEEPSTAKES.		
Lord Faxonia, bull two years old or over and family.....	George Bement.....	San Pablo.
Lord Faxonia, bull of any age.....	George Bement.....	San Pablo.
Sybilla, cow of any age.....	George Bement.....	San Pablo.
CLASS XXV—GRADED CATTLE—COWS.		
Lady Jane, three years old or over.....	J. Lynch.....	Petaluma.
Snow, three years old or over.....	Robert Crane.....	Santa Rosa.
Flora, two years old.....	J. Lynch.....	Petaluma.
Big Bertha, one year old.....	J. H. White.....	Lakeville.
Lillie, one year old.....	J. Lynch.....	Petaluma.
Constance, one year old.....	E. Steiger.....	Sonoma.
Claude Lee, heifer calf under one year.....	J. H. White.....	Lakeville.
Mabel, heifer calf under one year.....	J. Lynch.....	Sonoma.

THIRD DEPARTMENT.

Name of Animal.	Owner.	Address.
CLASS XXX—SHEEP—SOUTH, SHROPSHIRE, OXFORD, AND HAMPSHIRE DOWNS.		
Ram, two years old or over.....	Robert Crane.....	Santa Rosa.
Ram, two years old or over.....	R. H. Crane.....	Petaluma.
Ram, one year old.....	R. H. Crane.....	Petaluma.
Three ram lambs.....	Robert Crane.....	Santa Rosa.
Three ram lambs.....	R. H. Crane.....	Petaluma.
Three ewes, two years old or over.....	Robert Crane.....	Santa Rosa.
Three ewes, two years old or over.....	R. H. Crane.....	Petaluma.
Three ewes, one year old.....	R. H. Crane.....	Petaluma.
Three ewe lambs.....	Robert Crane.....	Santa Rosa.
Three ewe lambs.....	R. H. Crane.....	Petaluma.
CLASS XXXII—SWINE—POLAND—CHINA.		
Boar, one year old or over.....	R. H. Crane.....	Petaluma.
Boar, six months old.....	R. H. Crane.....	Petaluma.
Sow, one year old or over.....	R. H. Crane.....	Petaluma.
Sow, six months old.....	R. H. Crane.....	Petaluma.
Sow, and five pigs under six months.....	R. H. Crane.....	Petaluma.
CLASS XXXIII—JERSEY RED OR DUROC.		
Sow, one year old.....	Geo. Zimmerman.....	Petaluma.

THIRD DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
CLASS XXXIV—PURE BRED POULTRY.		
Light Brahma fowls.....	R. H. Crane.....	Petaluma.
Light Brahma chicks.....	J. V. Hill.....	Petaluma.
Light Brahma chicks.....	R. H. Crane.....	Petaluma.
CLASS XXXVII.		
Buff Cochín chicks.....	J. V. Hill.....	Petaluma.
CLASS XXXVIII.		
Plymouth Rock fowls.....	J. Blackburn.....	Petaluma.
Plymouth Rock chicks.....	J. Blackburn.....	Petaluma.
CLASS XXXIX.		
Wyandotte fowls.....	J. Blackburn.....	Petaluma.
Wyandotte chicks.....	J. Blackburn.....	Petaluma.
CLASS XLVIII.		
Brown-Red Game fowls.....	J. Loranger.....	Petaluma.
Brown-Red Game fowls.....	O. Elmore.....	Petaluma.
Brown-Red Game chicks.....	O. Elmore.....	Petaluma.
CLASS XLIX.		
Duckwing Game fowls.....	J. Loranger.....	Petaluma.
Duckwing Game fowls.....	O. Elmore.....	Petaluma.
Duckwing Game chicks.....	O. Elmore.....	Petaluma.
CLASS L.		
Black-Breasted Game fowls.....	O. Elmore.....	Petaluma.
Black-Breasted Game chicks.....	O. Elmore.....	Petaluma.
Black-Breasted Game chicks.....	J. Loranger.....	Petaluma.
CLASS LI.		
Bantam fowls.....	J. V. Hill.....	Petaluma.
Bantam fowls.....	R. H. Crane.....	Petaluma.
Bantam chicks.....	R. H. Crane.....	Petaluma.
CLASS LVI.		
Rouen ducks.....	A. J. Christie.....	Stony Point.
CLASS LVII.		
Pekin ducks.....	A. J. Christie.....	Stony Point.
CLASS LVIII.		
Toulouse geese.....	R. H. Crane.....	Petaluma.

FOURTH DEPARTMENT.

Articles Exhibited.	EXHIBITOR.	Address.
CLASS LXII—GRAIN, FLOUR, ETC.		
Sheaf of barley, 100 heads.....	J. Bloom.....	Petaluma.
Sheaf of barley, 100 heads.....	T. C. Putman.....	Petaluma.
Sheaf of barley, 100 heads.....	N. Wiswell.....	Petaluma.
Sheaf of barley, 100 heads.....	D. F. Whitlatch.....	Petaluma.
Sack of common barley, 100 pounds.....	R. Andrews.....	Petaluma.
Sack of common barley, 100 pounds.....	H. E. Chapman.....	Petaluma.
Sack of common barley, 100 pounds.....	J. Lynch.....	Petaluma.
Sack of shelled white corn, 100 pounds.....	A. Weishand.....	Petaluma.
Sack of shelled white corn, 100 pounds.....	Robt. Crane.....	Santa Rosa.
Sack of shelled white corn, 100 pounds.....	N. Wiswell.....	Petaluma.
Sack of shelled yellow corn, 100 pounds.....	F. W. Stratton.....	Petaluma.
Ten ears of white corn.....	N. Wiswell.....	Petaluma.
Ten ears of white corn.....	J. Gossage.....	Petaluma.
Ten ears of yellow corn.....	A. Weishand.....	Petaluma.
Ten ears of yellow corn.....	J. Gossage.....	Petaluma.
Exhibit of corn on stalk.....	A. Weishand.....	Petaluma.

FOURTH DEPARTMENT—Continued.

Articles Exhibited.	EXHIBITOR.	Address.
Exhibit of corn on stalk	A. Armstrong	Petaluma.
Exhibit of corn on stalk	R. Andrews	Petaluma.
Exhibit of corn on stalk	Robt. Crane	Santa Rosa.
Exhibit of corn on stalk	N. Wiswell	Petaluma.
Exhibit of corn on stalk	F. W. Stratton	Petaluma.
Exhibit of corn on stalk	J. Gossage	Petaluma.
Sack of corn meal	Winans & Son	Petaluma.
Sack of wheat flour	Golden Eagle Mills	Petaluma.
Sheaf of white or black oats, 100 heads	R. Andrews	Petaluma.
Sheaf of white or black oats, 100 heads	J. Bloom	Petaluma.
Sheaf of white or black oats, 100 heads	I. R. Jewell	Petaluma.
Sheaf of white or black oats, 100 heads	P. Mullally	Bloomfield.
Sack of black oats, 100 pounds	R. Andrews	Petaluma.
Sack of rye, 100 pounds	J. Bloom	Petaluma.
Sack of large white wheat	C. S. Gibson	Petaluma.
Sack of large white wheat	R. Andrews	Petaluma.
Sack of large white wheat	Robt. Crane	Santa Rosa.
Sack of large white wheat	O. Elmore	Petaluma.
Sack of large white wheat	J. Lynch	Petaluma.
Sack of club wheat	A. Jackson	Petaluma.
Sheaf of wheat, any variety, 100 heads	A. Weishand	Petaluma.
Sheaf of wheat, any variety, 100 heads	C. S. Gibson	Petaluma.
Sheaf of wheat, any variety, 100 heads	R. Andrews	Petaluma.
Sheaf of wheat, any variety, 100 heads	J. Bloom	Petaluma.
Sheaf of wheat, any variety, 100 heads	T. C. Putman	Petaluma.
Sheaf of wheat, any variety, 100 heads	D. F. Whitlatch	Petaluma.
Sheaf of wheat, any variety, 100 heads	A. Jackson	Petaluma.
Sheaf of wheat, any variety, 100 heads	C. D. Grover	Petaluma.
Sheaf of wheat, any variety, 100 heads	A. Higgins	Petaluma.
CLASS LXIII—VEGETABLES, ROOTS, ETC.		
Six blood beets	T. C. Putman	Petaluma.
Six blood beets	H. E. Chapman	Petaluma.
Six blood beets	R. Andrews	Petaluma.
Exhibit of sugar beets	E. H. Cheeney	Bodega.
Exhibit of beans, three varieties	A. Armstrong	Petaluma.
Exhibit of beans, three varieties	E. H. Cheeney	Bodega.
Exhibit of beans, three varieties	R. Andrews	Petaluma.
Exhibit of carrots	A. Weishand	Petaluma.
Exhibit of carrots	E. H. Cheeney	Bodega.
Exhibit of carrots	R. Andrews	Petaluma.
Exhibit of carrots	N. Wiswell	Petaluma.
Exhibit of carrots	C. Hawkins	Geyserville.
Exhibit of cabbage, five heads	A. Weishand	Petaluma.
Exhibit of cabbage, five heads	E. H. Cheeney	Bodega.
Exhibit of cabbage, five heads	C. Hawkins	Geyserville.
Exhibit of cultivated grass seed	R. Andrews	Petaluma.
Exhibit of cultivated grass seed	J. Bloom	Petaluma.
Exhibit of mangel-wurzel beets	Robert Crane	Santa Rosa.
Exhibit of mangel-wurzel beets	T. C. Putman	Petaluma.
Exhibit of mangel-wurzel beets	H. E. Chapman	Petaluma.
Exhibit of mangel-wurzel beets	C. Hawkins	Geyserville.
Exhibit of onions	A. Wieshand	Petaluma.
Exhibit of onions	N. Wiswell	Petaluma.
Exhibit of onions	C. Hawkins	Geyserville.
Collection of potatoes, five varieties	A. Armstrong	Petaluma.
Collection of potatoes, five varieties	E. H. Cheeney	Bodega.
Collection of potatoes, five varieties	P. Mullally	Bloomfield.
Collection of potatoes, five varieties	C. Hawkins	Geyserville.
Single variety of potatoes	Volkert Bros.	Petaluma.
Single variety of potatoes	R. Andrews	Petaluma.
Single variety of potatoes	P. Mullally	Bloomfield.
Single variety of potatoes	C. Hawkins	Geyserville.
Single variety of sweet potatoes	R. Ferguson	Santa Rosa.
Exhibit of parsnips	N. Wiswell	Petaluma.
Exhibit of pieplant	R. Andrews	Petaluma.
Exhibit of pieplant	S. E. Jameson	Petaluma.
Exhibit of pumpkins	A. Wieshand	Petaluma.
Exhibit of pumpkins	R. Andrews	Petaluma.

FOURTH DEPARTMENT—Continued.

Articles Exhibited.	EXHIBITOR.	Address.
Exhibit of pumpkins	J. Gossage	Petaluma.
Exhibit of rutabagas	J. Bloom	Petaluma.
Exhibit of squashes	E. H. Cheeney	Bodega.
Exhibit of squashes	R. Andrews	Petaluma.
Exhibit of squashes	I. R. Jewell	Petaluma.
Exhibit of squashes	T. C. Putman	Petaluma.
Exhibit of squashes	N. Wiswell	Petaluma.
Exhibit of squashes	F. W. Stratton	Petaluma.
Exhibit of squashes	C. Hawkins	Geyserville.
Exhibit of turnips	R. Andrews	Petaluma.
Exhibit of turnips	J. Bloom	Petaluma.
Exhibit of turnips	N. Wiswell	Petaluma.
Exhibit of turnips	D. F. Whitlatch	Petaluma.
Exhibit of turnips	C. Hawkins	Geyserville.
Display of products raised by one person on one farm	A. Armstrong	Petaluma.
Display of products raised by one person on one farm	R. Andrews	Petaluma.
Display of products raised by one person on one farm	N. Wiswell	Petaluma.
Display of products raised by one person on one farm	C. Hawkins	Petaluma.
CLASS LXIV—FRUITS, GRAPES, NUTS, ETC.		
Largest and best collection raised in one orchard	B. A. Parks	Petaluma.
Largest and best collection raised in one orchard	W. J. Winans	Petaluma.
Largest and best collection raised in one orchard	J. Merritt	Petaluma.
Exhibit of apples	E. H. Cheeney	Bodega.
Exhibit of apples	R. Crane	Santa Rosa.
Exhibit of apples	B. A. Parks	Petaluma.
Exhibit of apples	W. J. Winans	Petaluma.
Exhibit of apples	R. Andrews	Petaluma.
Exhibit of apples	J. Merritt	Petaluma.
Single variety of six apples	C. S. Gibson	Petaluma.
Single variety of six apples	Mrs. S. C. Pierce	Petaluma.
Single variety of six apples	B. A. Parks	Petaluma.
Single variety of six apples	W. J. Winans	Petaluma.
Single variety of six apples	A. Higgins	Petaluma.
Single variety of six apples	R. Andrews	Petaluma.
Single variety of six apples	J. Merritt	Petaluma.
Single variety of six apples	J. Adams	Santa Rosa.
Single variety of six apples	A. Woodworth	Tomales.
Six varieties of six apples	B. A. Parks	Petaluma.
Six varieties of six apples	W. J. Winans	Petaluma.
Six varieties of six apples	J. Merritt	Petaluma.
Six varieties of six apples	J. Adams	Santa Rosa.
Collection of pears	E. H. Cheeney	Bodega.
Collection of pears	Robert Crane	Santa Rosa.
Collection of pears	B. A. Parks	Petaluma.
Collection of pears	J. H. Drummond	Glen Ellen.
Single variety of six pears	C. S. Gibson	Petaluma.
Single variety of six pears	T. C. Putman	Petaluma.
Single variety of six pears	A. Jackson	Petaluma.
Single variety of six pears	B. A. Parks	Petaluma.
Single variety of six pears	A. Higgins	Petaluma.
Single variety of six pears	R. Andrews	Petaluma.
Single variety of six pears	J. H. Drummond	Glen Ellen.
Single variety of six pears	J. Adams	Santa Rosa.
Exhibit of peaches	Robert Crane	Santa Rosa.
Exhibit of peaches	B. A. Parks	Petaluma.
Exhibit of peaches	J. Merritt	Petaluma.
Single variety of six peaches	N. Wiswell	Petaluma.
Single variety of six peaches	Mrs. S. C. Pierce	Petaluma.
Single variety of six peaches	R. Andrews	Petaluma.
Single variety of six peaches	J. Merritt	Petaluma.
Exhibit of plums	E. H. Cheeney	Bodega.

FOURTH DEPARTMENT—Continued.

Articles Exhibited.	EXHIBITOR.	Address.
Exhibit of plums	Mrs. S. C. Pierce	Petaluma.
Exhibit of plums	B. A. Parks	Petaluma.
Exhibit of plums	F. F. Ennis	Petaluma.
Exhibit of plums	J. Merritt	Petaluma.
Exhibit of plums	J. H. Drummond	Glen Ellen.
Exhibit of plums	J. Adams	Santa Rosa.
Single variety of plums	B. A. Parks	Petaluma.
Single variety of plums	R. Andrews	Petaluma.
Single variety of plums	F. F. Ennis	Petaluma.
Single variety of plums	J. Merritt	Petaluma.
Single variety of plums	J. Adams	Santa Rosa.
Six quinces	E. H. Cheeney	Bodega.
Six quinces	C. S. Gibson	Petaluma.
Six quinces	Mrs. S. C. Pierce	Petaluma.
Six quinces	B. A. Parks	Petaluma.
Six quinces	A. Higgins	Petaluma.
Six quinces	R. Andrews	Petaluma.
Six quinces	J. Merritt	Petaluma.
Exhibit of prunes	F. F. Ennis	Petaluma.
Exhibit of prunes	J. Adams	Santa Rosa.
Single variety of prunes	F. F. Ennis	Petaluma.
Single variety of prunes	J. Adams	Santa Rosa.
Exhibit of nectarines	B. A. Parks	Petaluma.
Exhibit of nectarines	J. H. Drummond	Glen Ellen.
Largest and best collection of grapes raised from one vineyard	J. H. Drummond	Glen Ellen.
Exhibit of foreign grapes	Robert Crane	Santa Rosa.
Exhibit of foreign grapes	J. H. Drummond	Glen Ellen.
Collection of almonds	Mrs. S. C. Pierce	Petaluma.
Collection of almonds	B. A. Parks	Petaluma.
Collection of almonds	R. Andrews	Petaluma.
Collection of peanuts	A. Armstrong	Petaluma.
Collection of English walnuts	Mrs. S. C. Pierce	Petaluma.
Collection of English walnuts	J. Adams	Santa Rosa.
Exhibit of watermelons	A. Armstrong	Petaluma.
Exhibit of watermelons	E. R. Charles	Petaluma.
Exhibit of watermelons	R. Andrews	Petaluma.
Exhibit of muskmelons	A. Armstrong	Petaluma.
Exhibit of muskmelons	N. Wiswell	Petaluma.
Exhibit of muskmelons	E. R. Charles	Petaluma.
Exhibit of muskmelons	J. Adams	Santa Rosa.
Exhibit of cantaloupe melons	C. S. Gibson	Petaluma.
Exhibit of cantaloupe melons	E. R. Charles	Petaluma.
Exhibit of cantaloupe melons	J. Adams	Santa Rosa.
CLASS LXV—PRESERVED FRUITS, ETC.		
Exhibit of kiln-dried fruits, five varieties	J. H. Hunt	Sebastopol.
Exhibit of sun-dried fruits, five varieties	B. A. Parks	Petaluma.
Exhibit of kiln-dried apples	J. H. Hunt	Sebastopol.
Exhibit of sun-dried apples	B. A. Parks	Petaluma.
Exhibit of kiln-dried peaches	J. H. Hunt	Sebastopol.
Exhibit of sun-dried peaches	B. A. Parks	Petaluma.
Exhibit of kiln-dried plums	J. H. Hunt	Sebastopol.
Exhibit of sun-dried plums	B. A. Parks	Petaluma.
Exhibit of dried plums, seeded	J. H. Hunt	Sebastopol.
Exhibit of sun-dried prunes	B. A. Parks	Petaluma.
Exhibit of canned fruits	Mrs. L. G. Nay	Petaluma.
Exhibit of jellies	Mrs. A. Roseburgh	Petaluma.
Exhibit of jellies	Mrs. L. G. Nay	Petaluma.
Exhibit of jellies	Mrs. F. Andrews	Petaluma.
Exhibit of jellies	Miss M. Risk	Petaluma.
Exhibit of preserves	Mrs. L. G. Nay	Petaluma.
Exhibit of pickles	Mrs. L. G. Nay	Petaluma.
Exhibit of pickles	Mrs. S. E. Jameson	Petaluma.
Exhibit of pickles	Mrs. L. H. Patty	Petaluma.

FOURTH DEPARTMENT—Continued.

Articles Exhibited.	EXHIBITOR.	Address.
CLASS LXVI—BUTTER, CHEESE, HAM, BACON, AND HONEY.		
Ten rolls of fresh butter	E. H. Cheeney	Bodega.
Ten rolls of fresh butter	J. Bloom	Petaluma.
Ten rolls of fresh butter	I. R. Jewell	Petaluma.
Ten rolls of fresh butter	Volkert Bros.	Petaluma.
Ten rolls of fresh butter	J. W. Lawrence	Tomaes.
Ten rolls of fresh butter	C. Martin	Petaluma.
Ten rolls of fresh butter	A. C. Johnston	Hamlet.
Ten rolls of fresh butter	G. W. Ormsby	Petaluma.
Ten rolls of fresh butter	W. M. Dickson	Petaluma.
Ten rolls of fresh butter	M. Jarvis	Petaluma.
Ten rolls of fresh butter	D. S. Dickson	Petaluma.
Ten rolls of fresh butter	A. Woodworth	Tomaes.
Exhibit of hams	Robt. Crane	Santa Rosa.
Exhibit of bacon	Robt. Crane	Santa Rosa.
Exhibit of new cheese	I. R. Jewell	Petaluma.
Exhibit of new cheese	Hall Bros.	Petaluma.
Exhibit of cheese one year old	Hall Bros.	Petaluma.
Exhibit of cream cheese	Hall Bros.	Petaluma.
Exhibit of cream cheese	I. R. Jewell	Petaluma.
Exhibit of cream cheese	L. Cantel	Petaluma.
Largest variety of cheese	I. R. Jewell	Petaluma.
Largest variety of cheese	Hall Bros.	Petaluma.
Exhibit of comb honey	Mrs. L. H. Patty	Petaluma.
CLASS LXVIII—WINES, CIDER, ALE, ETC.		
Exhibit of wines	I. De Turk	Santa Rosa.
Exhibit of wines	J. H. Drummond	Glen Ellen.
Exhibit of wines	J. L. Watson	Sonoma.
Exhibit of port wine	I. De Turk	Santa Rosa.
Exhibit of red wine	Mrs. L. H. Patty	Petaluma.
Exhibit of red wine	I. De Turk	Santa Rosa.
Exhibit of red wine	J. H. Drummond	Glen Ellen.
Exhibit of red wine	J. L. Watson	Sonoma.
Exhibit of red wine	E. Maller	Healdsburg.
Exhibit of white wine	Mrs. L. H. Patty	Petaluma.
Exhibit of blackberry wine	I. De Turk	Santa Rosa.
Exhibit of blackberry wine	J. H. Drummond	Glen Ellen.
Exhibit of blackberry wine	J. L. Watson	Sonoma.
Exhibit of blackberry brandy	Mrs. L. H. Patty	Petaluma.
Exhibit of brandy	I. De Turk	Santa Rosa.
Exhibit of blackberry cordial	Mrs. L. H. Patty	Petaluma.
CLASS LXIX—TOWNSHIP EXHIBITS.		
Vallejo Township	Wiswell & Gibson	Petaluma.
Petaluma Township	Andrews & Merritt	Petaluma.
Sonoma Township	J. H. Drummond	Glen Ellen.
Santa Rosa Township	J. Adams	Santa Rosa.

FIFTH DEPARTMENT.

Articles Exhibited.	EXHIBITOR.	Address.
CLASS LXX—AGRICULTURAL IMPLEMENTS, HARDWARE, ETC.		
Sidehill plow	R. F. Thomas	Sonoma.
Churn	Rodd & Camm	Petaluma.
Model fruit drier	J. W. Cassidy	Petaluma.
Exhibit of dairy utensils	Rodd & Camm	Petaluma.
CLASS LXXI—CARRIAGES, BUGGIES, AND WAGONS.		
Exhibit of carriages, buggies, and wagons	Wm. Zartman & Co.	Petaluma.
Top buggy	Wm. Zartman & Co.	Petaluma.
Two-wheeled cart	E. Hopes	Petaluma.

TRANSACTIONS OF THE
FIFTH DEPARTMENT—Continued.

Articles Exhibited.	EXHIBITOR.	Address.
Two-wheeled cart.....	Wm. Zartman & Co.....	Petaluma.
Two-wheeled cart.....	D. W. C. Putman.....	Petaluma.
Spring wagon.....	E. Hopes.....	Petaluma.
Spring wagon.....	Wm. Zartman & Co.....	Petaluma.
Carriage trimming.....	Ellsworth & Northrup.....	Petaluma.
CLASS LXXII—SADDLERY AND HARNESS.		
Exhibit of saddlery.....	Ellsworth & Northrup.....	Petaluma.
Set of double harness, light.....	Ellsworth & Northrup.....	Petaluma.
Set of single harness, light.....	Ellsworth & Northrup.....	Petaluma.
Saddle.....	Ellsworth & Northrup.....	Petaluma.
Set of double work harness.....	Ellsworth & Northrup.....	Petaluma.
Exhibit of boots, etc.....	Ellsworth & Northrup.....	Petaluma.
CLASS LXXIII—MISCELLANEOUS EXHIBITS OF DISTRICT MANUFACTURE AND HANDIWORK.		
Exhibit of upholstery.....	Ellsworth & Son.....	Petaluma.
Exhibit of blacksmithing.....	E. Hopes.....	Petaluma.
Exhibit of blacksmithing.....	Wm. Zartman & Co.....	Petaluma.
Exhibit of boots and shoes.....	Hale Bros.....	Petaluma.
Exhibit of boots and shoes.....	W. J. Palmer.....	Petaluma.
Exhibit of samples silk culture.....	L. Stockdale.....	Petaluma.
Exhibit of bookbinding.....	J. A. Cowen.....	Petaluma.
Exhibit of brooms.....	T. H. Cheeney.....	Petaluma.
Washing machine.....	N. King.....	Petaluma.
Model gate.....	L. J. Johnson.....	Petaluma.
Chairs.....	Ellsworth & Son.....	Petaluma.
Exhibit of wood turning.....	Rodd & Camm.....	Petaluma.
Exhibit of soap.....	S. E. Jameson.....	Petaluma.
Exhibit of planing mill work.....	Rodd & Camm.....	Petaluma.
CLASS LXXIV—SWEEPSTAKES.		
Exhibit of groceries.....	Winans & Son.....	Petaluma.
Exhibit of dry goods.....	Hale Bros.....	Petaluma.
Exhibit of silverware.....	L. F. Ellsworth & Co.....	Petaluma.
Exhibit of shelf hardware.....	Bauer & Co.....	Petaluma.
Exhibit of agricultural implements.....	Bauer & Co.....	Petaluma.
Exhibit of furniture.....	Ellsworth & Son.....	Petaluma.
Exhibit of pianos and organs.....	F. W. Spencer & Co.....	San Francisco.

SIXTH DEPARTMENT.

Articles Exhibited.	EXHIBITOR.	Address.
CLASS LXXV—EMBROIDERY, NEEDLEWORK, SEWING, KNITTING, ETC.		
Specimen of needlework, ten varieties.....	Mrs. C. Northrup.....	Petaluma.
Specimen of needlework, ten varieties.....	Miss J. Perry.....	Petaluma.
Specimen of needlework, ten varieties.....	Mrs. F. W. Perry.....	Petaluma.
Specimen of needlework, ten varieties.....	Miss Nettie Brown.....	Petaluma.
Exhibit of family machine sewing.....	Mrs. L. G. Nay.....	Petaluma.
Exhibit of family machine sewing.....	Miss E. Houx.....	Petaluma.
Silk embroidery on silk or velvet.....	Mrs. F. B. Perry.....	Petaluma.
Silk embroidery on silk or velvet.....	Miss J. Perry.....	Petaluma.
Silk embroidery on silk or velvet.....	Mrs. F. W. Perry.....	Petaluma.
Silk embroidery on silk or velvet.....	Mrs. G. W. Davis.....	Petaluma.
Silk embroidery on silk or velvet.....	Miss K. Weston.....	Petaluma.
Cotton embroidery.....	Mrs. F. B. Perry.....	Petaluma.
Cotton embroidery.....	Mrs. F. W. Perry.....	Petaluma.
Cotton embroidery.....	Miss K. Weston.....	Petaluma.
Cotton embroidery.....	Miss E. Houx.....	Petaluma.
Cotton embroidery.....	Mrs. B. M. Button.....	Petaluma.
Embroidery on lace.....	Mrs. F. B. Perry.....	Petaluma.
Embroidery on lace.....	Miss J. Perry.....	Petaluma.
Point lace work.....	Miss N. Brown.....	Petaluma.
Point lace work.....	Miss Julia Ormsby.....	Petaluma.

SIXTH DEPARTMENT—Continued.

Articles Exhibited.	EXHIBITOR.	Address.
Etching	Mrs. C. Northrup	Petaluma.
Etching	Mrs. S. C. Pierce	Petaluma.
Etching	Miss L. Stockdale	Petaluma.
Etching	Miss K. Weston	Petaluma.
Etching	Miss N. Brown	Petaluma.
Etching	Miss E. Houx	Petaluma.
Etching	Miss J. Ormsby	Petaluma.
Etching	Miss A. Vestal	Petaluma.
Embroidered sofa cushion	Mrs. C. Northrup	Petaluma.
Embroidered wall panel	Mrs. C. Northrup	Petaluma.
Kensington work in chenille	Mrs. C. Northrup	Petaluma.
Kensington work in crewel	Mrs. C. Northrup	Petaluma.
Kensington work in silk	Mrs. C. Northrup	Petaluma.
Crochet work in cotton	Miss K. Bryan	Petaluma.
Crochet work in cotton	Miss L. Stockdale	Petaluma.
Crochet work in cotton	Miss E. Cantell	Petaluma.
Crochet work in cotton	Miss J. Ormsby	Petaluma.
Spanish lace	Miss E. Houx	Petaluma.
Transferred work	Miss K. Weston	Petaluma.
Crazy silk patchwork	Mrs. C. Northrup	Petaluma.
Crazy silk patchwork	Miss K. Bryan	Petaluma.
Crazy silk patchwork	Mrs. J. Scott	Petaluma.
Crazy silk patchwork	Mrs. G. B. Davis	Petaluma.
Crazy silk patchwork	Miss N. Brown	Petaluma.
Crazy silk patchwork	Miss J. Ormsby	Petaluma.
Crazy silk patchwork	Mrs. J. E. Merrett	Petaluma.
Crazy silk patchwork	Miss A. Vestal	Petaluma.
Lambrequin	Mrs. C. Northrup	Petaluma.
Lambrequin	Miss N. Brown	Petaluma.
Lambrequin	Miss M. Scott	Petaluma.
Arrasene work	Mrs. C. Northrup	Petaluma.
Arrasene work	Miss N. Brown	Petaluma.
Ribbon work	Mrs. C. Northrup	Petaluma.
Couching	Mrs. C. Northrup	Petaluma.
Couching	Miss K. Weston	Petaluma.
Afghan	Mrs. S. C. Pierce	Petaluma.
Afghan	Mrs. A. B. Derby	Petaluma.
Afghan	Mrs. S. Sperry	Petaluma.
Afghan	Miss L. Cox	Petaluma.
Toilet set	Mrs. C. Northrup	Petaluma.
Ottoman cover	Mrs. C. Northrup	Petaluma.
Crochet shawl	Mrs. H. P. Brainerd	Petaluma.
Tatting	Miss J. Ormsby	Petaluma.
Netting	Mrs. F. B. Perry	Petaluma.
Netting	Mrs. G. B. Davis	Petaluma.
Hand-knit underwear	Miss E. Houx	Petaluma.
Hearth rug	Mrs. S. Sperry	Petaluma.
Hearth rug	Miss L. Vestal	Petaluma.
Pair of stockings, woolen or cotton	Mrs. F. B. Perry	Petaluma.
Pair of stockings, woolen or cotton	Miss J. Perry	Petaluma.
Pair of stockings, woolen or cotton	Mrs. F. W. Perry	Petaluma.
Pair of stockings, woolen or cotton	Mrs. W. A. Lewis	Petaluma.
Table scarf	Mrs. C. Northrup	Petaluma.
Table scarf	Miss N. Brown	Petaluma.
Table scarf	Miss A. Vestal	Petaluma.
Piece of fancy knitting	Mrs. F. B. Perry	Petaluma.
Piece of fancy knitting	Mrs. E. Doda	Petaluma.
Piece of fancy knitting	Mrs. F. W. Perry	Petaluma.
Piece of fancy knitting	Mrs. W. A. Lewis	Petaluma.
Piece of fancy knitting	Mrs. A. B. Derby	Petaluma.
Knit quilt	Mrs. E. Doda	Petaluma.
Silk quilt	Miss K. Weston	Petaluma.
Quilting	Miss J. Ormsby	Petaluma.
Baby's dress	Mrs. G. C. Young	Petaluma.
Baby's dress	Miss J. Ormsby	Petaluma.
Gent's shirt	Miss E. Houx	Petaluma.
Patchwork	Mrs. J. E. Merriitt	Petaluma.
Rag carpet	Mrs. B. M. Button	Petaluma.

SIXTH DEPARTMENT—Continued.

Articles Exhibited.	EXHIBITOR.	Address.
CLASS LXXVI—BREAD, CAKE, ETC.		
Wheat bread	Miss J. S. Gibson	Petaluma.
Wheat bread	Miss G. Hamilton	Petaluma.
Wheat bread	Mrs. J. Campbell	Petaluma.
Wheat bread	Mrs. M. Carey	Petaluma.
Wheat bread	Miss A. Waters	Petaluma.
Wheat bread	Mrs. A. B. Derby	Petaluma.
Wheat bread	Miss E. Mooney	Petaluma.
Wheat bread	Mrs. H. P. Brainerd	Petaluma.
Wheat bread	Miss E. Houx	Petaluma.
Wheat bread	Miss B. Blume	Petaluma.
Wheat bread	Miss I. Walker	Petaluma.
Wheat bread	Miss A. Haskins	Petaluma.
Wheat bread	Miss M. Risk	Petaluma.
Boston brown bread	Miss J. L. Gibson	Petaluma.
Boston brown bread	Mrs. M. Carey	Petaluma.
Boston brown bread	Miss A. Waters	Petaluma.
Boston brown bread	Mrs. A. B. Derby	Petaluma.
Boston brown bread	Mrs. H. P. Brainerd	Petaluma.
Boston brown bread	Miss E. Houx	Petaluma.
Boston brown bread	Miss B. Blume	Petaluma.
Boston brown bread	Miss A. Haskins	Petaluma.
Boston brown bread	Mrs. F. Cassidy	Petaluma.
Corn bread	Miss J. L. Gibson	Petaluma.
Corn bread	Mrs. M. Carey	Petaluma.
Corn bread	Miss A. Waters	Petaluma.
Corn bread	Mrs. A. B. Derby	Petaluma.
Corn bread	Miss E. Houx	Petaluma.
Corn bread	Miss B. Blume	Petaluma.
Corn bread	Miss A. Haskins	Petaluma.
Fruit cake	Miss J. L. Gibson	Petaluma.
Fruit cake	Mrs. M. Carey	Petaluma.
Fruit cake	Miss E. Mooney	Petaluma.
Fruit cake	Miss E. Houx	Petaluma.
Fruit cake	Miss B. Blume	Petaluma.
Fruit cake	Mrs. L. H. Patty	Petaluma.
Fruit cake	Miss A. Haskins	Petaluma.
Pound cake	Miss J. L. Gibson	Petaluma.
Pound cake	Mrs. M. Carey	Petaluma.
Pound cake	Mrs. A. B. Derby	Petaluma.
Pound cake	Miss B. Blume	Petaluma.
Pound cake	Miss I. Walker	Petaluma.
Pound cake	Miss A. Haskins	Petaluma.
Pound cake	Miss M. Risk	Petaluma.
Pound cake	Miss E. Houx	Petaluma.
Sponge cake	Miss J. L. Gibson	Petaluma.
Sponge cake	Mrs. J. Campbell	Petaluma.
Sponge cake	Mrs. M. Carey	Petaluma.
Sponge cake	Miss E. Mooney	Petaluma.
Sponge cake	Mrs. H. P. Brainerd	Petaluma.
Sponge cake	Miss B. Blume	Petaluma.
Sponge cake	Miss I. Walker	Petaluma.
Sponge cake	Miss A. Haskins	Petaluma.
Coffee cake	Miss J. L. Gibson	Petaluma.
Coffee cake	Mrs. J. Campbell	Petaluma.
Coffee cake	Mrs. M. Carey	Petaluma.
Coffee cake	Miss E. Houx	Petaluma.
Coffee cake	Miss B. Blume	Petaluma.
Coffee cake	Miss I. Walker	Petaluma.
Coffee cake	Miss A. Haskins	Petaluma.
Coffee cake	Mrs. F. Cassidy	Petaluma.
Coffee cake	Miss M. Risk	Petaluma.
Assortment of tarts	Miss J. L. Gibson	Petaluma.
Assortment of tarts	Mrs. H. P. Brainerd	Petaluma.
Assortment of tarts	Miss E. Houx	Petaluma.
Assortment of tarts	Miss B. Blume	Petaluma.
Assortment of tarts	Miss A. Haskins	Petaluma.

SIXTH DEPARTMENT—Continued.

Articles Exhibited.	EXHIBITOR.	Address.
SPECIAL PREMIUM.*		
Best general exhibit, in class seventy-six, by one person	Miss J. L. Gibson	Petaluma.
Best general exhibit, in class seventy-six, by one person	Miss E. Houx	Petaluma.
Best general exhibit, in class seventy-six, by one person	Miss B. Blume	Petaluma.
Best general exhibit, in class seventy-six, by one person	Miss A. Haskins	Petaluma.
CLASS LXXVII—FOR CHILDREN UNDER FOURTEEN YEARS OF AGE.		
Exhibit of plain sewing	Lillian Lewis	Petaluma.
Exhibit of plain sewing	M. Blume	Petaluma.
Exhibit of needlework, three pieces	L. Lewis	Petaluma.
Exhibit of needlework, three pieces	M. Blume	Petaluma.
Worsted embroidery	D. Fairbanks	Petaluma.
Silk embroidery	D. Fairbanks	Petaluma.
Crochet work	L. Lewis	Petaluma.
Crochet work	M. Blume	Petaluma.
Crochet work	C. Burkland	Petaluma.
Knitting	J. Perry	Petaluma.
Knitting	L. Lewis	Petaluma.
Darning	M. Cassidy	Petaluma.
Etching	L. Lewis	Petaluma.
Etching	E. Gilbert	Petaluma.
Etching	M. Blume	Petaluma.
Crazy patchwork	G. R. Maynard	Petaluma.
Pencil drawing	G. R. Maynard	Petaluma.
Pencil drawing	M. Weishand	Petaluma.
Crayon drawing	G. R. Maynard	Petaluma.
Specimen of penmanship	G. Hamilton	Petaluma.
Specimen of penmanship	Walter Knapp	Bloomfield.
Specimen of penmanship	H. Campbell	Petaluma.
White bread	J. Gibson	Petaluma.
White bread	C. Gibson	Petaluma.
White bread	J. L. Gibson	Petaluma.
Sponge cake	G. Hamilton	Petaluma.
Sponge cake	J. L. Gibson	Petaluma.
Sponge cake	L. Dickson	Petaluma.
Sponge cake	E. Gilbert	Petaluma.
Pound cake	J. L. Gibson	Petaluma.
Fruit cake	J. L. Gibson	Petaluma.
Exhibit of mechanical skill and workmanship	C. Trueholtz	Petaluma.
Exhibit of mechanical skill and workmanship	V. Pozzi	Petaluma.
Painting	Lona Mizner	Petaluma.
Painting	Paul Sperry	Petaluma.
Most tastily made calico dress	M. Blume	Petaluma.
Largest variety of eggs	M. Hunt	Petaluma.
Largest variety of eggs	C. Trueholtz	Petaluma.
CLASS LXXVIII—PAINTING, ORNAMENTAL WORK, ETC.		
Collection of paintings	Miss F. Thompson	Petaluma.
Collection of paintings	Mrs. J. Campbell	Petaluma.
Collection of paintings	Mrs. S. R. Jewell	Santa Rosa.
Collection of paintings	Miss E. Brown	Petaluma.
Painting in oil on canvas	Mrs. N. Gould	Petaluma.
Painting in oil on canvas	Miss F. Thompson	Petaluma.
Painting in oil on canvas	Mrs. S. R. Jewell	Santa Rosa.
Painting in oil on canvas	Miss E. Brown	Petaluma.
Painting in oil on canvas	Miss M. E. Brown	Petaluma.
Painting in oil on satin	Miss E. Brown	Petaluma.
Portrait painting	E. R. Healy	Santa Rosa.
Painting in water colors	Mrs. J. Campbell	Petaluma.

* Special premium by the President, J. H. White, open to young ladies between fifteen and twenty years of age.

SIXTH DEPARTMENT—Continued.

Articles Exhibited.	EXHIBITOR.	Address.
Landscape painting	Mrs. N. Gould	Petaluma.
Landscape painting	Mrs. S. R. Jewell	Santa Rosa.
Landscape painting	Miss E. Brown	Petaluma.
Floral painting	Mrs. N. Gould	Petaluma.
Floral painting	Mrs. S. R. Jewell	Santa Rosa.
Floral painting	Miss E. Brown	Petaluma.
Animal painting	Mrs. N. Gould	Petaluma.
Animal painting	Mrs. S. R. Jewell	Santa Rosa.
Animal painting	Miss I. Walker	Petaluma.
Animal painting	Mrs. H. L. Weston	Petaluma.
Porcelain painting	Miss S. Jewell	Petaluma.
Kensington painting	Miss A. Vestal	Petaluma.
Kensington painting	Miss M. Scott	Petaluma.
Lustro painting	Mrs. J. Campbell	Petaluma.
Lustro painting	Miss A. Vestal	Petaluma.
Pencil drawing	Miss I. Walker	Petaluma.
Crayon drawing	E. R. Healy	Santa Rosa.
Crayon drawing	Mrs. P. B. Gilbert	Petaluma.
Crayon drawing	Miss W. Kuffle	Petaluma.
Crayon drawing	Miss A. J. Brown	Petaluma.
Sketching from nature	Miss G. R. Maynard	Petaluma.
Sketching from nature	Mrs. S. R. Jewell	Santa Rosa.
Sketching from nature	Miss W. Kuffle	Petaluma.
Sketching from nature	Miss I. Walker	Petaluma.
Feather work	Miss J. Perry	Petaluma.
Feather work	Miss A. Vestal	Petaluma.
CLASS LXXIX—PLANTS, BOUQUETS, ETC.		
Collection of trees, shrubs, and flowering plants	W. A. Reinholdt	Petaluma.
Collection of trees, shrubs, and flowering plants	Mrs. G. Burdell	Petaluma.
Exhibit of hardy evergreen trees and shrubs for garden	W. A. Reinholdt	Petaluma.
Exhibit of semi-tropic fruit trees in fruit	Mrs. G. Burdell	Petaluma.
Exhibit of flowering roses in pots	W. A. Reinholdt	Petaluma.
Miniature garden with growing specimens	Maud Clark	Petaluma.
Exhibit of fuchsias	W. A. Reinholdt	Petaluma.
Exhibit of begonias	W. A. Reinholdt	Petaluma.
Floral design	W. A. Reinholdt	Petaluma.
Exhibit of cut dahlias	W. A. Reinholdt	Petaluma.
Exhibit of cut flowers	Miss G. R. Maynard	Petaluma.
Exhibit of cut flowers	W. A. Reinholdt	Petaluma.
Exhibit of hanging baskets	Mrs. G. Burdell	Petaluma.
Pair of vase bouquets	Miss E. Mooney	Petaluma.
Exhibit of paper flowers	Mrs. F. B. Perry	Petaluma.

PREMIUMS AWARDED—1888.

FIRST DEPARTMENT.

Name of Animal.	Exhibitor	Address.	Award.
CLASS I—THOROUGHBRED HORSES— STALLIONS.			
Three Cheers, four years old or over	T. G. Jones.....	Santa Rosa	\$15 00
Sid, three years old.....	B. C. Holly.....	Vallejo.....	\$12 00
Wild Oats, two years old	Wm. L. Appleby	Santa Clara	\$9 00
MARES.			
Not Idle, four years old or over.....	Wm. L. Appleby	Santa Clara	\$10 00
Laura Gardner, four years old or over.....	Wm. L. Appleby	Santa Clara	\$5 00
Nancy, three years old	B. C. Holly.....	Vallejo.....	\$8 00
Carmen, three years old	Wm. L. Appleby	Santa Clara	\$4 00
Futurity, two years old	Wm. L. Appleby	Santa Clara	\$6 00
Lady Helen, two years old	Wm. L. Appleby	Santa Clara	\$3 00
CLASS II—STANDARD TROTTERS— STALLIONS.			
Woodnut, four years old or over	B. C. Holly.....	Vallejo.....	\$15 00
Alcona, Jr., four years old or over.....	J. P. Rodehaver.....	Petaluma	\$7 50
Silas Skinner, three years old	J. P. Rodehaver.....	Petaluma	\$12 00
Director, Jr., three years old	J. H. White	Lakeville.....	\$6 00
Storm, two years old	B. E. Harris.....	San Francisco.....	\$9 00
MARES.			
Fearless, four years old or over.....	B. E. Harris.....	San Francisco.....	\$10 00
Lorena, one year old	B. E. Harris.....	San Francisco.....	\$4 00
Rosa, one year old	S. Sperry.....	Petaluma	R. R.
CLASS III—ROADSTERS—STALLIONS.			
Hernani, four years old or over	J. H. White	Lakeville.....	\$15 00
Whalebone, four years old or over.....	H. Hasbrouck.....	Petaluma	\$7 50
Antevenio, one year old	P. J. Shafter.....	Olema	\$6 00
Joe, one year old	J. H. White	Lakeville.....	R. R.
MARES.			
Minnie, four years old or over.....	J. R. Rose.....	Lakeville.....	\$10 00
Kate H, four years old or over	F. T. Maynard	Petaluma	\$5 00
Princess, three years old	J. H. White	Lakeville.....	\$8 00
Henrietta D, two years old.....	J. H. White	Lakeville.....	\$6 00
Lizzie, two years old.....	T. Pare.....	Petaluma	\$3 00
Dot, one year old.....	J. H. White	Lakeville.....	\$4 00
—, under one year	J. H. White	Lakeville.....	\$3 00
FAMILIES—STALLION WITH FIVE COLTS.			
Hernani	J. H. White	Lakeville.....	\$25 00
CLASS IV—CARRIAGE, SADDLE, AND GEN- TLEMEN'S ROADSTERS.			
Tom and Jerry.....	J. T. Smith.....	Petaluma	\$40 00
Viking, single buggy horse	P. J. Shafter.....	Olema	\$5 00
Hugo, single buggy horse	J. H. White	Lakeville.....	\$2 50
Bay Johnnie, saddle horse.....	F. Roberts	Petaluma	\$5 00
CLASS V—NORMANS AND OTHER FRENCH DRAFT BREEDS—STALLIONS.			
Beaufort, four years old or over.....	J. P. Rodehaver.....	Petaluma	\$15 00
Hercules, four years old or over.....	T. Skillman	Petaluma	\$7 50
Attila, three years old	H. Wilsey	Petaluma	\$12 00
Durand, two years old	H. Wilsey	Petaluma	\$9 00
De Chartres, two years old	L. A. Devota	Novato	\$4 50
Right Sort, under one year.....	P. Hennelly.....	Petaluma	\$3 00
John L, under one year	J. P. Rodehaver.....	Petaluma	R. R.

TRANSACTIONS OF THE
FIRST DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
MARES.			
Queen of the Valley, four years old or over	P. Hennelly	Petaluma	\$10 00
Annie, four years old or over	W. K. Hill	Petaluma	\$6 00
Black Bess, two years old	W. K. Hill	Petaluma	\$6 00
Maggie, two years old	L. Helman	Petaluma	\$3 00
Queen P, colt under one year	Robert Crane	Santa Rosa	\$3 00
FAMILIES—STALLION WITH FIVE COLTS.			
Beaufort	J. P. Rodehaver	Petaluma	\$20 00
CLASS VI—CLYDESDALE AND OTHER ENGLISH DRAFT BREEDS—STALLIONS.			
Morning Star, four years old or over	Clydesdale Breed- ers' Association	Petaluma	\$15 00
Captain Sifton, four years old or over	J. Fritsch	Petaluma	\$7 50
Alexander Pointsman, three years old	P. Hennelly	Petaluma	\$12 00
Pointsman, Jr., three years old	F. Roberts	Petaluma	\$6 00
Buffalo Bill, two years old	Denman & McNear	Petaluma	\$9 00
Gladstone, two years old	H. E. Chapman	Petaluma	\$4 50
Robert Burns, one year old	R. H. Crane	Petaluma	\$6 00
Pointsman, Jr., one year old	Denman & McNear	Petaluma	R. R.
Fingermark, colt under one year	Robert Crane	Santa Rosa	\$3 00
Pointsman 2d, colt under one year	H. Gibbs	Petaluma	R. R.
MARES.			
Maid of the Mist, four years old or over	Denman & McNear	Petaluma	\$10 00
Blossom 2d, four years old or over	Denman & McNear	Petaluma	\$5 00
Annie, three years old	R. H. Crane	Petaluma	\$8 00
Nellie Clyde, three years old	P. Hennelly	Petaluma	\$4 00
Belle, two years old	Denman & McNear	Petaluma	\$6 00
Annie Belle, two years old	R. H. Crane	Petaluma	\$3 00
Kate Clyde, one year old	P. Hennelly	Petaluma	\$4 00
Blossom 3d, colt under one year	Denman & McNear	Petaluma	\$3 00
Maid 2d, colt under one year	Denman & McNear	Petaluma	R. R.
FAMILIES—STALLION WITH FIVE COLTS.			
Morning Star	Clydesdale Breed- ers' Association	Petaluma	\$20 00
CLASS VII—GENERAL PURPOSES—STALLIONS.			
Vindicator, three years old or over	T. Skillman	Petaluma	\$12 00
Gallion, three years old or over	T. Skillman	Petaluma	\$6 00
Pointer, one year old	R. H. Crane	Petaluma	\$2 50
Alice, colt under one year	Robert Crane	Petaluma	B. R.
MARES.			
Kate, three years old or over	H. E. Chapman	Petaluma	\$10 00
Fanny, three years old or over	H. E. Chapman	Petaluma	\$5 00
Nellie, under one year	H. E. Chapman	Petaluma	B. R.

SECOND DEPARTMENT.

Name of Animal.	Exhibitor.	Address.	Award.
CLASS IX—SHORTHORNS—BULLS.			
Mugwump, three years old or over	W. Page	Penn's Grove	\$20 00
Sonoma Chief, three years old or over	J. Lynch	Petaluma	\$8 00
Protector, two years old	W. Page	Penn's Grove	\$15 00
Brindlebane, two years old	R. H. Crane	Petaluma	\$6 00
Belt, one year old	W. Page	Penn's Grove	\$10 00
Holdfast, one year old	W. Page	Penn's Grove	R. R.
Giltedge, under one year	W. Page	Penn's Grove	\$3 00
Pickrell, under one year	W. Page	Penn's Grove	R. R.
COWS.			
Maita, three years old or over	W. Page	Penn's Grove	\$15 00
Belle Strawberry, three years old or over	W. Page	Penn's Grove	\$6 00

SECOND DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
Christmas Eve, two years old.....	W. Page.....	Penn's Grove.....	\$10 00
Enriquita, two years old.....	W. Page.....	Penn's Grove.....	\$4 00
Belle of the Oaks, one year old.....	W. Page.....	Penn's Grove.....	\$6 00
Maud 4th, one year old.....	R. H. Crane.....	Petaluma.....	R. R.
Sweet Milk, under one year.....	W. Page.....	Penn's Grove.....	\$3 00
Manuella, under one year.....	W. Page.....	Penn's Grove.....	R. R.
CLASS X—HERD AND SWEEPSTAKES.			
Mugwump, four cows and calf.....	W. Page.....	Penn's Grove.....	\$20 00
Mugwump, bull of any age.....	W. Page.....	Penn's Grove.....	\$10 00
Maita, cow of any age.....	W. Page.....	Penn's Grove.....	\$5 00
HOLSTEINS—BULLS.			
Oro Blanco, three years old or over.....	J. H. White.....	Lakeville.....	\$20 00
Huachuca, two years old.....	J. H. White.....	Lakeville.....	\$15 00
Juneau, two years old.....	J. H. White.....	Lakeville.....	\$6 00
Halbert, one year old.....	J. H. White.....	Lakeville.....	\$10 00
Laredo, one year old.....	J. H. White.....	Lakeville.....	R. R.
Montecito, calf under one year.....	J. H. White.....	Lakeville.....	\$3 00
Demmings, calf under one year.....	J. H. White.....	Lakeville.....	R. R.
COWS.			
Winfridala, three years old or over.....	J. H. White.....	Lakeville.....	\$15 00
Annemie, three years old or over.....	J. H. White.....	Lakeville.....	\$6 00
Lasquite, two years old.....	J. H. White.....	Lakeville.....	\$10 00
Etchetah, two years old.....	J. H. White.....	Lakeville.....	\$4 00
Brinhilda, one year old.....	J. H. White.....	Lakeville.....	\$6 00
Minnie Wayward, one year old.....	J. H. White.....	Lakeville.....	R. R.
Chapala, calf under one year.....	J. H. White.....	Lakeville.....	\$3 00
Eudora, calf under one year.....	J. H. White.....	Lakeville.....	R. R.
CLASS XX—HERD AND SWEEPSTAKES.			
Oro Blanco, four cows and one calf.....	J. H. White.....	Lakeville.....	\$20 00
Oro Blanco, bull of any age.....	J. H. White.....	Lakeville.....	\$10 00
Winfridala, cow of any age.....	J. H. White.....	Lakeville.....	\$5 00
CLASS XXI—JERSEYS AND GUERNSEYS—BULLS.			
Wildflower, three years old or over.....	Hall Brothers.....	Petaluma.....	\$20 00
Pert, three years old or over.....	D. S. Dickson.....	Petaluma.....	\$8 00
Essex, one year old.....	P. L. McGill.....	Sonoma.....	\$10 00
Jack, calf under one year.....	P. L. McGill.....	Sonoma.....	\$3 00
Sonoma Chief, calf under one year.....	P. L. McGill.....	Sonoma.....	R. R.
COWS.			
Sonoma, three years old or over.....	P. L. McGill.....	Sonoma.....	\$15 00
Juanita, three years old or over.....	P. L. McGill.....	Sonoma.....	\$6 00
Gazelle, two years old.....	Hall Bros.....	Petaluma.....	\$10 00
Eveline, two years old.....	P. L. McGill.....	Sonoma.....	\$4 00
Etta, one year old.....	P. L. McGill.....	Sonoma.....	\$6 00
Pansy, one year old.....	Hall Bros.....	Petaluma.....	R. R.
Silverleaf, calf under one year.....	Hall Bros.....	Petaluma.....	\$3 00
Dot, calf under one year.....	P. L. McGill.....	Sonoma.....	R. R.
CLASS XXII—HERD AND SWEEPSTAKES.			
Essex, bull of any age.....	P. L. McGill.....	Sonoma.....	\$10 00
Wildflower, bull of any age.....	Hall Bros.....	Petaluma.....	R. R.
Gazelle, cow of any age.....	Hall Bros.....	Petaluma.....	\$5 00
Juanita, cow of any age.....	P. L. McGill.....	Sonoma.....	R. R.
CLASS XXIII—AYRSHIRES—BULLS.			
Lord Faxion, two years old.....	Geo. Bement.....	San Pablo.....	\$15 00
Hotspur, one year old.....	Geo. Bement.....	San Pablo.....	\$10 00
Red Mikado, one year old.....	Geo. Bement.....	San Pablo.....	R. R.
Express, calf under one year.....	Geo. Bement.....	San Pablo.....	\$3 00
COWS.			
Marian, three years old or over.....	Geo. Bement.....	San Pablo.....	\$15 00
Sybilla, three years old or over.....	Geo. Bement.....	San Pablo.....	\$6 00

SECOND DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
Ethelberta, two years old	Geo. Bement	San Pablo	\$10 00
Faxonia, one year old	Geo. Bement	San Pablo	\$6 00
Highland Beauty, calf under one year ..	Geo. Bement	San Pablo	\$3 00
CLASS XXV—GRADED CATTLE—COWS.			
Snow, three years old or over	Robt. Crane	Santa Rosa	\$10 00
Flora, two years old	John Lynch	Petaluma	\$7 00
Big Bertha, one year old	J. H. White	Lakeville	\$5 00
Claud Lee, calf under one year	J. H. White	Lakeville	\$2 00

THIRD DEPARTMENT.

Name of Animal.	Exhibitor.	Address.	Award.
CLASS XXX—SOUTH, SHROPSHIRE, OXFORD, AND HAMPSHIRE DOWNS—RAMS.			
Best ram, two years old or over	R. H. Crane	Petaluma	\$6 00
Second best ram, two years old or over ..	Robt. Crane	Santa Rosa	\$3 00
Best ram one year old	R. H. Crane	Petaluma	\$5 00
Best three ram lambs under one year ..	Robert Crane	Santa Rosa	\$4 00
Second best three ram lambs under one year	R. H. Crane	Petaluma	\$2 00
EWES.			
Best ewes, two years old or over	R. H. Crane	Petaluma	\$5 00
Second best ewes, two years old or over ..	Robert Crane	Santa Rosa	\$2 50
Best ewes, one year old	R. H. Crane	Petaluma	\$4 00
Best three ewe lambs, under one year ..	Robert Crane	Santa Rosa	\$2 00
Second best three ewe lambs, under one year	R. H. Crane	Petaluma	\$1 00
CLASS XXXII—SWINE—CHINA-POLAND— BOARS.			
Best boar, one year old or over	R. H. Crane	Petaluma	\$6 00
Best boar, six months old	R. H. Crane	Petaluma	\$3 00
SOWS.			
Best sow, one year old or over	R. H. Crane	Petaluma	\$5 00
Best sow, six months old	R. H. Crane	Petaluma	\$2 50
Best sow, and five pigs under six months	R. H. Crane	Petaluma	\$6 00
CLASS XXXIV—PURE BRED POULTRY.			
Best pair light Brahma fowls	R. H. Crane	Petaluma	\$2 00
Best pair light Brahma chicks	R. H. Crane	Petaluma	\$1 00
Second best pair light Brahma chicks ..	J. V. Hill	Petaluma	R. R.
Best pair buff Cochins	J. V. Hill	Petaluma	\$1 00
CLASS XXXVIII.			
Best pair Plymouth Rock fowls	J. Blackburn	Petaluma	\$2 00
Best pair Plymouth Rock chicks	J. Blackburn	Petaluma	\$1 00
CLASS XXXIX.			
Best pair Wyandotte fowls	J. Blackburn	Petaluma	\$2 00
Best pair Wyandotte chicks	J. Blackburn	Petaluma	\$1 00
CLASS XLVIII.			
Best pair Red Game fowls	J. Loranger	Petaluma	\$2 00
Best pair Red Game chicks	O. Elmore	Petaluma	\$1 00
Second best pair Red Game chicks	O. Elmore	Petaluma	R. R.
CLASS XLIX.			
Best pair Duckwing Game fowls	J. Loranger	Petaluma	\$2 00
Second best pair Duckwing Game fowls ..	O. Elmore	Petaluma	R. R.
Best pair Duckwing Game chicks	O. Elmore	Petaluma	\$1 00

THIRD DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
CLASS L.			
Best pair Brown-breasted Game fowls.....	O. Elmore.....	Petaluma.....	\$2 00
Best pair Brown-breasted Game chicks.....	J. Loranger.....	Petaluma.....	\$1 00
Second best pair Brown-breasted Game chicks.....	O. Elmore.....	Petaluma.....	R. R.
CLASS LI.			
Best pair Bantam fowls.....	R. H. Crane.....	Petaluma.....	\$2 00
Second best pair Bantam fowls.....	J. V. Hill.....	Petaluma.....	R. R.
Best pair Bantam chicks.....	R. H. Crane.....	Petaluma.....	\$1 00
CLASS LVI.			
Best pair Rouen ducks.....	A. J. Christie.....	Bloomfield.....	\$2 00
CLASS LVII.			
Best pair Pekin ducks.....	A. J. Christie.....	Bloomfield.....	\$2 00
CLASS LVIII.			
Best pair Toulouse geese.....	R. H. Crane.....	Petaluma.....	\$2 50

FOURTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS LXII—GRAIN, FRUITS, ETC.			
Best sheaf of barley.....	D. F. Whitlatch.....	Petaluma.....	\$1 00
Best sack of common barley.....	J. Lynch.....	Petaluma.....	\$2 00
Best sack of shelled white corn.....	N. Wiswell.....	Petaluma.....	\$2 00
Best sack of shelled yellow corn.....	F. W. Stratton.....	Petaluma.....	\$1 00
Best ten ears of white corn.....	J. Gossage.....	Petaluma.....	\$1 00
Best ten ears of yellow corn.....	A. Wieshand.....	Petaluma.....	\$1 00
Best exhibit of corn on stalk.....	A. Wieshand.....	Petaluma.....	\$1 00
Best sack of cornmeal.....	Winans & Son.....	Petaluma.....	Diploma.
Best sack of wheat flour.....	Golden Eagle Flouring Mills.....	Petaluma.....	Diploma.
Best sack of black oats.....	R. Andrews.....	Petaluma.....	\$2 00
Best sheaf of oats.....	P. Mullally.....	Bloomfield.....	\$1 00
Best sack of rye.....	J. Bloom.....	Petaluma.....	\$2 00
Best sack of large white wheat.....	Robert Crane.....	Santa Rosa.....	\$2 00
Best sack of club wheat.....	A. Jackson.....	Petaluma.....	\$2 00
Best sheaf of wheat.....	R. Andrews.....	Petaluma.....	\$1 00
CLASS LXIII—VEGETABLES, ROOTS, ETC.			
Best six blood beets.....	H. E. Chapman.....	Petaluma.....	\$1 00
Best exhibit of sugar beets.....	E. H. Cheeney.....	Bodega.....	\$1 00
Best exhibit of beans.....	E. H. Cheeney.....	Bodega.....	\$2 00
Best exhibit of carrots.....	A. Wieshand.....	Petaluma.....	\$1 00
Best exhibit of cabbage.....	C. Hawkins.....	Geyserville.....	\$1 00
Best exhibit of cultivated grass seed.....	J. Bloom.....	Petaluma.....	\$2 00
Best exhibit of mangel-wurzel.....	T. C. Putman.....	Petaluma.....	\$1 00
Best exhibit of onions.....	C. Hawkins.....	Geyserville.....	\$1 00
Best collection of potatoes, five varieties.....	E. H. Cheeney.....	Bodega.....	\$5 00
Best single variety of potatoes.....	P. Mullally.....	Bloomfield.....	\$2 00
Best single variety of sweet potatoes.....	R. Ferguson.....	Santa Rosa.....	\$1 00
Best exhibit of parsnips.....	N. Wiswell.....	Petaluma.....	\$1 00
Best exhibit of pie plant.....	S. E. Jameson.....	Petaluma.....	\$1 00
Best exhibit of pumpkins.....	J. Gossage.....	Petaluma.....	\$2 00
Best exhibit of rutabagas.....	J. Bloom.....	Petaluma.....	\$1 00
Best exhibit of squashes.....	T. C. Putman.....	Petaluma.....	\$2 00
Best exhibit of turnips.....	C. Hawkins.....	Geyserville.....	\$1 00
Best display of products raised by one person on one farm.....	R. Andrews.....	Petaluma.....	\$10 00

FOURTH DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS LXIV—FRUITS, GRAPES, NUTS, ETC.			
Largest and best collection of fruits raised in one orchard	John Merritt	Petaluma	\$25 00
Best exhibit of apples, six varieties	John Merritt	Petaluma	\$5 00
Best single variety of six apples	John Merritt	Petaluma	\$2 00
Best six varieties of apples	B. A. Parks	Petaluma	\$3 00
Best collection of pears, six varieties	B. A. Parks	Petaluma	\$5 00
Best single variety of six pears	B. A. Parks	Petaluma	\$2 00
Best exhibit of peaches, three varieties	B. A. Parks	Petaluma	\$5 00
Best single variety of six peaches	John Merritt	Petaluma	\$2 00
Best exhibit of plums, three varieties	F. F. Ennis	Petaluma	\$5 00
Best single variety of plums	F. F. Ennis	Petaluma	\$2 00
Best six quinces	J. Merritt	Petaluma	\$2 00
Best exhibit of prunes, three varieties	F. F. Ennis	Petaluma	\$2 00
Best single variety of prunes	F. F. Ennis	Petaluma	\$2 00
Best exhibit of nectarines	J. H. Drummond	Glen Ellen	\$2 00
Largest and best collection of grapes raised in one orchard	J. H. Drummond	Glen Ellen	\$20 00
Best exhibit of foreign grapes	J. H. Drummond	Glen Ellen	\$5 00
Best collection of almonds	B. A. Parks	Petaluma	\$2 00
Best collection of peanuts	A. Armstrong	Petaluma	\$2 00
Best collection of English walnuts	Mrs. S. C. Pierce	Petaluma	\$2 00
Best collection of watermelons	E. R. Charles	Petaluma	\$1 00
Best collection of muskmelons	E. R. Charles	Petaluma	\$1 00
Best collection of cantaloupe melons	E. R. Charles	Petaluma	\$1 00
CLASS LXV—PRESERVED FRUITS, ETC.			
Best kiln-dried fruits, five varieties	J. H. Hunt	Sebastopol	\$7 50
Best kiln-dried apples, two varieties	J. H. Hunt	Sebastopol	\$3 00
Best sun-dried fruits, five varieties	B. A. Parks	Petaluma	\$5 00
Best sun-dried apples, two varieties	B. A. Parks	Petaluma	\$2 00
Best kiln-dried peaches, two varieties	J. H. Hunt	Sebastopol	\$3 00
Best sun-dried peaches, two varieties	B. A. Parks	Petaluma	\$2 00
Best kiln-dried plums, two varieties	J. H. Hunt	Sebastopol	\$3 00
Best sun-dried plums, two varieties	B. A. Parks	Petaluma	\$2 00
Best seeded dried plums, two varieties	J. H. Hunt	Sebastopol	\$3 00
Best sun-dried prunes, two varieties	B. A. Parks	Petaluma	\$2 00
Best domestic canned fruit, five varieties	Mrs. L. G. Nay	Petaluma	\$2 50
Best jellies, five varieties	Miss Mattie Risk	Petaluma	\$2 50
Best preserves, three varieties	Mrs. L. G. Nay	Petaluma	\$3 00
Best pickles, three varieties	Mrs. L. G. Nay	Petaluma	\$2 00
CLASS LXVI—BUTTER, CHEESE, HAMS, BACON, AND HONEY.			
Best fresh butter	G. W. Ormsby	Petaluma	\$10 00
Second best fresh butter	D. S. Dixon	Petaluma	\$5 00
Best hams	Robert Crane	Santa Rosa	\$2 00
Best side of bacon	Robert Crane	Santa Rosa	\$2 00
Best new cheese	I. R. Jewell	Petaluma	\$3 00
Second best new cheese	Hall Bros.	Petaluma	\$1 00
Best cheese one year old	Hall Bros.	Petaluma	\$3 00
Best cream cheese	L. Cantel	Petaluma	\$2 00
Second best cream cheese	I. R. Jewell	Petaluma	\$1 00
Best and largest variety of cheese	I. R. Jewell	Petaluma	\$5 00
CLASS LXVIII—WINES, CIDER, ALE, ETC.			
Best exhibit of wines	I. De Turk	Santa Rosa	\$20 00
Best port wine	I. De Turk	Santa Rosa	\$4 00
Best red wine	J. L. Watson	Sonoma	\$4 00
Best white wine	J. L. Watson	Sonoma	\$4 00
Best blackberry wine	J. L. Watson	Sonoma	\$4 00
Best brandy	J. L. Watson	Sonoma	\$4 00
Best blackberry cordial	J. L. Watson	Sonoma	\$2 00
CLASS LXIX—TOWNSHIP EXHIBITS.			
Best display of agricultural products	Gibson & Wiswell	Vallejo Twp.	\$60 00
Second best display of ag'l products	Andrews & Merritt	Petaluma Twp.	\$30 00
Third best display of ag'l products	J. H. Drummond	Sonoma Twp.	\$10 00

FIFTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS LXX—AGRICULTURAL IMPLEMENTS, HARDWARE, ETC.			
Best sidehill plow	R. B. Thomas	Sonoma	\$2 00
Best churn	Rodd & Camm	Petaluma	\$3 00
Best model fruit drier	J. W. Cassidy	Petaluma	Diploma.
Best exhibit of dairy utensils	Rodd & Camm	Petaluma	\$10 00
CLASS LXXI—CARRIAGES, BUGGIES, AND WAGONS.			
Best carriages, buggies, and wagons	Wm. Zartman & Co.	Petaluma	\$10 00
Best top buggy	Wm. Zartman & Co.	Petaluma	\$8 00
Best two-wheeled cart	Wm. Zartman & Co.	Petaluma	\$3 00
Best spring wagon	E. Hopes	Petaluma	\$5 00
Best carriage trimming	Ellsworth & Northrup	Petaluma	\$5 00
CLASS LXXII—SADDLERY AND HARNESS.			
Best saddlery	Ellsworth & Northrup	Petaluma	\$15 00
Best light double harness	Ellsworth & Northrup	Petaluma	\$7 00
Best light single harness	Ellsworth & Northrup	Petaluma	\$2 50
Best saddle	Ellsworth & Northrup	Petaluma	\$2 50
Best work harness, double	Ellsworth & Northrup	Petaluma	\$5 00
Best boots, etc.	Ellsworth & Northrup	Petaluma	\$2 50
Best single harness, heavy	Ellsworth & Northrup	Petaluma	\$5 00
CLASS LXXIII—MISCELLANEOUS EXHIBITS OF DISTRICT MANUFACTURES AND HAND- WORK.			
Best upholstery	Ellsworth & Son	Petaluma	\$7 50
Best blacksmithing	Wm. Zartman & Co.	Petaluma	\$2 00
Best boots and shoes	W. J. Palmer	Petaluma	\$3 00
Best display of samples of silk culture	Lena Stockdale	Petaluma	\$5 00
Best bookbinding	J. A. Cowen	Petaluma	Dip., \$2 00
Best brooms	T. H. Cheeney	Petaluma	\$2 00
Best washing machine	N. King	Petaluma	Diploma.
Best model gate	L. J. Johnson	Petaluma	\$3 00
Best chairs	Ellsworth & Son	Petaluma	\$3 00
Best wood turning	Rodd & Camm	Petaluma	\$2 00
Best soap	S. E. Jameson	Petaluma	Dip., \$5 00
Best millwork, moldings, brackets, cornice, etc.	Rodd & Camm	Petaluma	Dip., \$5 00
CLASS LXXIV—SWEEPSTAKES.			
Best exhibit of groceries	Winans & Son	Petaluma	\$10 00
Best exhibit of dry goods	Hale Bros. & Co.	Petaluma	\$10 00
Best exhibit of silverware	L. F. Ellsworth & Co.	Petaluma	\$10 00
Best exhibit of shelf hardware	Bauer & Co.	Petaluma	\$10 00
Best exhibit of agricultural implements	Bauer & Co.	Petaluma	\$10 00
Best exhibit of furniture	Ellsworth & Son	Petaluma	\$10 00
Best exhibit of pianos, organs, etc.	F. W. Spencer & Co.	San Francisco	Dip., \$10
Best fruit pitter	Fred. Rohrer	Santa Rosa	Diploma.

SIXTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS LXXV—EMBROIDERY, NEEDLEWORK, SEWING, KNITTING, ETC.			
Best specimen of needlework, ten varieties	Miss N. Brown	Petaluma	\$15 00
Second best specimen of needlework, ten varieties	Mrs. C. Northrup	Petaluma	\$5 00
Best family machine sewing	Mrs. L. G. Nay	Petaluma	\$3 00
Best silk embroidery on silk or velvet	Mrs. F. B. Perry	Petaluma	\$3 00
Best cotton embroidery	Miss K. Weston	Petaluma	\$2 00
Best embroidery on lace	Mrs. F. B. Perry	Petaluma	\$2 00
Best point lace embroidery	Miss N. Brown	Petaluma	\$2 00
Best etching	Miss N. Brown	Petaluma	\$2 00
Best embroidered sofa cushion	Mrs. C. Northrup	Petaluma	\$2 00
Best embroidered wall panel	Mrs. C. Northrup	Petaluma	\$2 00
Best kensington work in chenille	Mrs. C. Northrup	Petaluma	\$2 00
Best kensington work in crewel	Mrs. C. Northrup	Petaluma	\$2 00
Best kensington work in silk	Mrs. C. Northrup	Petaluma	\$2 00
Best crochet work in cotton	Miss K. Bryan	Petaluma	\$2 00
Best Spanish lace	Miss E. Houx	Petaluma	\$2 00
Best transferred work	Miss K. Weston	Petaluma	\$2 00
Best crazy silk patchwork	Mrs. C. Northrup	Petaluma	\$2 00
Best lambrequin	Miss N. Brown	Petaluma	\$2 00
Best arrasene work	Mrs. C. Northrup	Petaluma	\$2 00
Best ribbon work	Mrs. C. Northrup	Petaluma	\$2 00
Best couching	Mrs. C. Northrup	Petaluma	\$2 00
Best afghan	Mrs. A. B. Derby	Petaluma	\$2 00
Best toilet set	Mrs. C. Northrup	Petaluma	\$2 00
Best ottoman cover	Mrs. C. Northrup	Petaluma	\$2 00
Best crochet shawl	Mrs. H. P. Brainerd	Petaluma	\$2 00
Best tatting	Miss J. Ormsby	Petaluma	\$2 00
Best hand-knit underwear	Miss E. Houx	Petaluma	\$2 00
Best hearthrug	Mrs. S. Sperry	Petaluma	\$2 00
Best pair of stockings	Mrs. F. B. Perry	Petaluma	\$2 00
Best table scarf	Miss N. Brown	Petaluma	\$2 00
Best fancy knitting	Mrs. F. W. Perry	Petaluma	\$2 00
Best knit quilt	Mrs. E. Dado	Santa Rosa	\$2 00
Best silk quilt	Miss K. Weston	Petaluma	\$2 00
Best silk quilting	Miss J. Ormsby	Petaluma	\$2 00
Best baby's dress	Mrs. Geo. C. Young	Petaluma	\$2 50
Best gents' shirt	Mrs. E. Houx	Petaluma	\$2 00
Best patchwork	Mrs. E. S. Merritt	Petaluma	\$2 00
Best rag carpet	Mrs. B. M. Button	Petaluma	\$2 00
CLASS LXXVI—BREAD, CAKES, ETC.			
Best wheat bread	Mrs. S. B. Derby	Petaluma	\$3 00
Best corn bread	Miss A. Waters	Petaluma	\$3 00
Best sponge cake	Mrs. H. P. Brainerd	Petaluma	\$3 00
Best assortment of tarts	Miss Jennie Gibson	Petaluma	\$3 00
FOR YOUNG LADIES BETWEEN FIFTEEN AND TWENTY YEARS OF AGE.			
Best wheat bread	Annie Haskins	Petaluma	\$3 00
Best Boston brown bread	Effie Houx	Petaluma	\$3 00
Best pound cake	Effie Houx	Petaluma	\$3 00
Best fruit cake	Effie Houx	Petaluma	\$3 00
Best coffee cake	Effie Houx	Petaluma	\$3 00
SPECIAL PREMIUM.*			
Best general exhibit in class for young ladies	Effie Houx	Petaluma	\$20 00
CLASS LXXVII—FOR CHILDREN FOURTEEN YEARS OF AGE OR UNDER.			
Best plain sewing	M. Blume	Petaluma	\$3 00
Best needlework, three pieces	M. Blume	Petaluma	\$5 00
Best worsted embroidery	D. Fairbanks	Petaluma	\$2 50

*Special premium by J. H. White, President of the Association.

SIXTH DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Best silk embroidery	D. Fairbanks	Petaluma	\$2 50
Best crochet work	M. Blume	Petaluma	\$2 00
Best knitting	J. Perry	Petaluma	\$2 00
Best darning	M. Cassidy	Petaluma	\$2 00
Best etching	E. Gilbert	Petaluma	\$2 00
Best crazy patchwork	M. Ladner	Petaluma	\$2 00
Best pencil drawing	M. Weishand	Petaluma	\$2 00
Best crayon drawing	G. Maynard	Petaluma	\$2 00
Best penmanship	H. Campbell	Petaluma	\$2 00
Best white bread	J. L. Gibson	Petaluma	\$2 00
Best sponge cake	E. Gilbert	Petaluma	\$2 00
Best pound cake	J. L. Gibson	Petaluma	\$2 00
Best fruit cake	J. L. Gibson	Petaluma	\$2 00
Best exhibit of mechanical skill and work- manship	V. Pozzi	Petaluma	\$2 00
Best painting	Paul Sperry	Petaluma	\$2 50
Best and most tastily made calico dress	M. Blume	Petaluma	\$2 00
Largest variety of eggs	C. Trueholtz	Petaluma	\$2 00
CLASS LXXVIII—PAINTING, ORNAMENTAL WORK, ETC.			
Best collection of paintings	Miss F. Thompson	Petaluma	\$10 00
Best painting in oil on canvas	Mrs. S. R. Jewell	Santa Rosa	\$5 00
Best painting in oil on satin	Miss E. Brown	Petaluma	\$5 00
Best portrait painting in oil	E. R. Healy	Santa Rosa	\$5 00
Best painting in water colors	Mrs. J. Campbell	Petaluma	\$3 00
Best landscape painting	Mrs. N. Gould	Petaluma	\$5 00
Best flower painting	Mrs. N. Gould	Petaluma	\$5 00
Best animal painting	Mrs. S. R. Jewell	Santa Rosa	\$2 50
Best porcelain painting	Miss S. Jewell	Petaluma	\$3 00
Best kensington painting	Miss M. Scott	Petaluma	\$2 50
Best lustro painting	Miss A. Vestal	Petaluma	\$2 00
Best pencil drawing	Miss I. Walker	Petaluma	\$2 00
Best crayon drawing	E. R. Healy	Santa Rosa	\$2 00
Best sketching from nature	Mrs. S. R. Jewell	Santa Rosa	\$3 00
Best feather work	Miss A. Vestal	Petaluma	\$2 00
SPECIAL PREMIUM.*			
Best collection of drawings made by any school in Sonoma or Marin Counties	Steuben District; teacher, Mrs. R. L. Crane	Sonoma County	\$25 00
CLASS LXXIX—PLANTS, BOUQUETS, ETC.			
Best collection trees, shrubs, and flower- ing plants	Mrs. G. Burdell	Petaluma	Dp. & \$10
Best hardy evergreen trees and shrubs for gardens	W. A. Reinholdt	Petaluma	\$5 00
Best semi-tropic fruit trees in fruit	Mrs. G. Burdell	Petaluma	\$2 50
Best flowering roses in pots	W. A. Reinholdt	Petaluma	\$2 50
Best miniature garden	Maud Clark	Petaluma	\$5 00
Best floral design	W. A. Reinholdt	Petaluma	\$3 00
Best exhibit of cut flowers	G. R. Maynard	Petaluma	\$5 00
Best exhibit of dahlias	W. A. Reinholdt	Petaluma	\$2 50
Best hanging basket	Mrs. G. Burdell	Petaluma	\$2 50
Best pair of vase bouquets	Miss E. Mooney	Petaluma	\$2 00
Best paper flowers	Mrs. F. B. Perry	Petaluma	\$2 00
SPECIAL PREMIUMS—BY THE SOCIETY.			
For splendid exhibit	J. H. Drummond	Glen Ellen	\$25 00
Township display from Santa Rosa	J. Adams	Santa Rosa	\$25 00

SPECIAL PREMIUM—BY DR. G. M. SAUL, OF PETALUMA.

Best developed baby under one year old	Baby carriage, \$25
--	---------------------

*Special premium by J. H. Drummond.

SPEED PROGRAMME.

TUESDAY, AUGUST 21, 1888.

RACE No. 1—RUNNING.

For two-year olds. Twenty-five dollars entrance; ten dollars forfeit; one hundred and fifty dollars added; fifty dollars to second horse. Five eighths of a mile.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Joe Hoge, ch. c., by Joe Hooker.....	H. I. Thornton.....	San Francisco.
Little Phil, ch. c., by Leinster.....	T. Bally.....	Vallejo.
Jackpot, b. g., by Joe Hooker.....	Thomas G. Jones.....	Santa Rosa.

SUMMARY.

Jackpot.....	1
Joe Hoge.....	2
Little Phil.....	3

Time—1:03 $\frac{3}{4}$.

RACE No. 2—TROTTING.

2:30 Class. Purse, seven hundred dollars. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Rosie Mc, b. m., by Alex Button.....	G. W. Woodard.....	Yolo.
Elector, b. s., by Electioneer.....	O. A. Hickok.....	San Francisco.
Express, b. g., by Electioneer.....	Palo Alto Stock Farm.....	Menlo Park.
Judge, b. g., sire unknown.....	Jas. A. Dustin.....	San Francisco.
Franklin, blk. g., by General Reno.....	Chas. David.....	San Francisco.

SUMMARY.

Franklin.....	1	1	3	3	1
Elector.....	2	3	1	1	2
Rosie Mc.....	3	2	2	2	3

Time—2:22 $\frac{1}{2}$; 2:22 $\frac{1}{2}$; 2:24 $\frac{1}{2}$; 2:25 $\frac{1}{4}$; 2:25 $\frac{1}{2}$.

RACE No. 3—TROTTING.

2:23 Class. Purse, seven hundred dollars. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Alfred S, b. g., by Elmo.....	W. H. Seale.....	Mayfield.
Gertrude Russell, b. f., by Electioneer.....	Palo Alto Stock Farm.....	Menlo Park.
Gus Wilkes, b. g., sire unknown.....	Jas. Dustin.....	Oakland.
Thapsin, b. g., by Berlin.....	Wilbur F. Smith.....	Sacramento.

SUMMARY.

Alfred S.	1	1	1
Thapsin	2	2	3
Gus Wilkes	3	3	2

Time—2:21½; 2:26¼; 2:24.

WEDNESDAY, AUGUST 22, 1888.

RACE NO. 4—TROTTING.

District three-year olds. Purse, two hundred and fifty dollars. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Oaknut, s. s., by Dawn	W. R. Overholser	Petaluma.
Alice, ch. f., by Hernani	J. H. White	Lakeville.
Anti-Coolie, blk. c., by Anteo	I. De Turk	Santa Rosa.
Alto, r. c., by Anteo	M. O'Reily	Petaluma.
Alfred G, b. s., by Anteo	Guerne & Murphy	Santa Rosa.
Redwood, b. c., by Anteo	A. McFadgen	Santa Rosa.
Ben Davis, ch. g., by Great Tom	B. C. Holly	Vallejo.

SUMMARY.

Redwood	2	3	1	1	1
Ben Davis	1	1	4	2	2
Alfred G	3	2	2	3	3
Anti-Coolie	6	4	3	4	dis.
Alice	5	dis.			

Time—2:33¼; 2:31¼; 2:35; 2:31; 2:30¼.

RACE NO. 5—RUNNING.

For all ages. Free purse. Two hundred dollars. Mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Fusillade's Last, ch. f., by J. W. Norton	B. C. Holly	Vallejo.
St. Patrick, s. g., by Hubbard	D. McGovern	Petaluma.
Daisy D, b. m., by Wheatly	B. Cockrill	Salinas.

SUMMARY.

Daisy D.	1	1
Fusillade's Last	2	2
St. Patrick	dis.	

Time—1:45; 1:44.

RACE NO. 6—TROTTING.

For district yearlings. Ten dollars to accompany nominations; ten dollars June first; ten dollars July fifteen. One mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Ferndale, b. c., by Anteo	H. W. Peck	Healdsburg.
Leoline, b. f., by Clovis	Wilfred Page	Petaluma.
—, b. f., by Dawn	A. L. Whitney	Petaluma.
—, b. f., by Dawn	A. L. Whitney	Petaluma.
—, s. c., by Dawn	A. L. Whitney	Petaluma.

SUMMARY.

Leoline	1
Ferndale	2

Time—3:54 $\frac{1}{4}$.

RACE No. 7—TROTTING.

For named horses. Purse, six hundred dollars. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Fallis, br. s., by Electioneer	F. P. Lowell	Sacramento.
Lady Escott, ch. m., by Arthurton	J. A. Dustin	Oakland.
Perihelion, b. g., by Admiral	C. H. David	San Francisco.
Sonnet, b. m., by Benton	C. Marvin	Menlo Park.
Ben Ali, b. g., by G. M. Patchen	R. Havey	Oakland.

SUMMARY.

Fallis	5	1	1	1
Lady Escott	1	2	2	2
Ben Ali	2	4	4	3
Perihelion	4	3	3	4
Sonnet	3	dis.		

Time—2:26 $\frac{1}{2}$; 2:26 $\frac{1}{2}$; 2:28; 2:23.

RACE No. 8—TROTTING.

For two-year olds. Ten dollars to accompany nominations; twenty dollars June first; fifteen dollars July fifteenth; fifteen dollars August seventeenth. Two hundred and fifty dollars added. Mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Palo Alto Belle, b. f., by Electioneer	Palo Alto Stock Farm	Menlo Park.
Sunol, b. f., by Electioneer	Palo Alto Stock Farm	Menlo Park.
Coin, b. c., by Electioneer	Palo Alto Stock Farm	Menlo Park.
Colma, gr. f., by Electioneer	Palo Alto Stock Farm	Menlo Park.
Leon, b. c., by Electioneer	Palo Alto Stock Farm	Menlo Park.
Fortuna, b. f., by Florida	Z. E. Simmons	Pleasanton.
Edwin G., s. g., by Sidney	E. Giddings	San Rafael.
Geo. Washington, b. c., by Mambrino Chief, Jr.	Thomas Smith	Vallejo.
Eclectic, b. s., by Electioneer	Wilfred Page	Pleasanton.
Jet Wilkes, b. f., by Guy Wilkes	San Mateo Stock Farm	San Mateo.
Annetta, br. f., by Le Grande	San Mateo Stock Farm	San Mateo.
Margaret S, b. f., by Director	Pleasanton Stock Farm	Pleasanton.

SUMMARY.

Sunol	1	1
Margaret S	2	2
Fortuna	3	3

Time—2:28 $\frac{1}{2}$; 2:26 $\frac{3}{4}$.

THURSDAY, AUGUST 23, 1888.

RACE NO. 9—RUNNING.

For three-year olds. Fifty dollars entrance; twenty-five dollars forfeit; two hundred and fifty dollars added. Winners of any race this year to carry five pounds extra; of two or more, ten pounds extra; maidens allowed five pounds. One and one eighth mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Nancy, ch. f., by Jim Brown	B. C. Holly	Vallejo.
Nabeau, b. g., by Nathan Coombs	William Boots	Milpitas.
Ledon, blk. g., by Nathan Coombs	William Boots	Milpitas.
Leon, b. c., by Leinster	F. P. Lowell	Sacramento.
Oscar Wilde, b. s., by Don Victor	Enoch Yates	Santa Rosa.
Kildare, s. g., by imp. Kyrle Daly	H. I. Thornton	San Francisco.

SUMMARY.

Leon	1
Nancy	2
Nabeau	3
Oscar Wilde	4

Time—1:58 $\frac{1}{2}$.

RACE NO. 10—TROTTING.

For yearlings. Ten dollars to accompany nominations; fifteen dollars, June first; ten dollars, July fifteenth; fifteen dollars, August seventeenth. One mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Lorena, b. f., by Jim Mulvaney	B. E. Harris	San Francisco.
Norris, ch. c., by Ansel	Palo Alto Stock Farm	Menlo Park.
Josie Williams, b. f., Goldnut	Geo. Kneier	Stockton.
Peep o' Day, ch. c., by Dawn	Wilfred Page	Petaluma.
Fleet, by Sidney	Valensin Stock Farm	Pleasanton.

SUMMARY.

Fleet	1
Lorena	2

Time—2:44.

RACE NO. 11—PACING.

For 2:24 Class. Patchen Vernon and Belmont Boy barred. Purse, six hundred dollars. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Little Hope, ch. g., by Tempest	Wm. B. Bradbury	San Francisco.
Racquet, blk. g., sire unknown	Chas. I. Haven	San Francisco.
Damiana, s. g., by Admiral	L. E. Clawson	San Francisco.
Prussian Boy, b. g., by General Benton	Peter Brandow	San Francisco.
Goldleaf, ch. f., by Sidney	Pleasanton St'k Farm	Pleasanton.
San Diego, b. g., by Victor	H. C. Airhart	San Diego.

SUMMARY.

Goldleaf	1	1	1
Damiana	3	4	2
San Diego	4	2	3
Little Hope	2	3	4
Racquet	dis.		
Prussian Boy	dis.		

Time—2:21 $\frac{1}{4}$; 2:21; 2:23.

FRIDAY, AUGUST 24, 1888.

RACE NO. 12—TROTTING.

For four-year olds or under. Sixty dollars entrance; ten dollars to accompany nomination; twenty dollars, June first; fifteen dollars, July first; fifteen dollars, August seventeenth; two hundred and fifty dollars added. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Maiden, b. f., by Electioneer	Palo Alto Stock Farm.	Menlo Park.
Ella, b. f., by Electioneer	Palo Alto Stock Farm.	Menlo Park.
Carlisle, ch. c., by Piedmont	Palo Alto Stock Farm.	Menlo Park.
Nemo, br. c., by Clay	Palo Alto Stock Farm.	Menlo Park.
Wellington, b. c., by Electioneer	Palo Alto Stock Farm.	Menlo Park.
Mortimer, b. s., by Electioneer	Wilfred Page.	Petaluma.
Gina Wilkes, b. f., by Guy Wilkes	San Mateo Stock Farm.	San Mateo.

SUMMARY.

Ella	1	1	2	1
Mortimer	2	2	1	2

Time—2:36; 2:29; 2:34 $\frac{1}{4}$; 2:35.

RACE NO. 13—RUNNING.

For all ages. Twenty-five dollars entrance; ten dollars forfeit; one hundred and fifty dollars added. One mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Fusillade's Last, ch. f., by J. W. Norton	B. C. Holly.	Vallejo.
Nancy, ch. f., by Jim Brown	B. C. Holly.	Vallejo.
St. Patrick, s. g., by Hubbard	D. McGovern.	Petaluma.
Oscar Wilde, b. s., by Don Victor	Enoch Yates.	Santa Rosa.
Kildare, s. g., by imp. Kyrle Daly	H. I. Thornton.	San Francisco.

SUMMARY.

Kildare	1
Fusillade's Last	2
Nancy	3

Time—1:45 $\frac{1}{2}$.

RACE No. 14—TROTTING.

For district two-year olds. Purse, two hundred dollars. Mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Secretary, blk. s., by Director	D. S. Frasier	Petaluma.
Geo. Washington, b. c., by Mambrino Chief, Jr.	Thos. Smith	Vallejo.
Henrietta D. ch. f., by Hernani	J. H. White	Lakeville.
Mountain Quail, b. f., by Hernani	J. H. White	Lakeville.
Captor, g. c., by Capri	A. J. Zane	Healdsburg.
G & M, b. s., by Anteo	Guerne & Murphy	Guerneville.
Eclectic, b. s., by Electioneer	W. Page	Petaluma.

SUMMARY.

Captor	1	1
Geo. Washington	2	2

Time—3:00½; 2:52¾.

THURSDAY, AUGUST 23, 1888.

RACE No. 15—TROTTING.

For named horses. Purse, one thousand dollars. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Arab, b. g., by Arthurton	O. A. Hickok	San Francisco.
Adair, b. g., by Electioneer	E. H. Miller	Sacramento.
Woodnut, s. s., by Nutwood	B. C. Holly	Vallejo.
Alfred S, b. g., by Elmo	H. W. Seale	Mayfield.

SUMMARY.

Arab	1	1	1
Woodnut	3	2	2
Alfred S	2	3	3
Adair	4	dr.	

Time—2:21; 2:24; 2:17½.

FRIDAY, AUGUST 24, 1888.

RACE No. 16—TROTTING.

For three-year olds. Sixty dollars stake: ten dollars to accompany nominations; twenty dollars June first; fifteen dollars July fifteenth; fifteen dollars August seventeenth; two hundred and fifty dollars added. Mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Monteith, b. c., by Electioneer	Palo Alto Stock Farm	Menlo Park.
Wavelet, b. f., by Piedmont	Palo Alto Stock Farm	Menlo Park.
Amigo, b. c., by Electioneer	Palo Alto Stock Farm	Menlo Park.
Anselma, ch. f., by Ansel	Palo Alto Stock Farm	Menlo Park.
Dinah, b. m., by Prompter	W. C. Harlan	Winters.
Minot, b. g., by Bay Rose	E. Giddings	San Rafael.
Memo, blk. s., by Sidney	Jas. P. Kerr	San Francisco.
Redwood, b. c., by Anteo	A. McFadgen	Santa Rosa.
Grandee, b. g., by Le Grande	San Mateo Stock Farm	San Mateo.
Direct, blk. s., by Director	Pleasanton Stock Farm	Pleasanton.

SUMMARY.

Grandee.....	1	1
Direct.....	2	2

Time—2:26; 2:23½.

RACE NO. 18—TROTTING.

For named horses. Purse, \$150. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Whalebone, b. s., by Inka.....	J. B. Hinkle.....	Petaluma.
Echo Royal, b. s., by Echo.....	Fred. Vail.....	Healdsburg.
Capri, g. s., by James Lick.....	S. J. Zane.....	Healdsburg.

SUMMARY.

Capri.....	1	1	2	0	2	1
Echo Royal.....	2	2	1	0	1	2
Whalebone.....	3	3	3	3	3	r. o.

Time—2:56½; 2:49; 2:50¼; 2:49½; 2:49; 2:52¼.

SATURDAY, AUGUST 25, 1888.

RACE NO. 17—RUNNING.

For all ages. Free for all. Purse, \$250. One and one half mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Sid, br. c., by imp. Sidarthur.....	B. F. Denio.....	Vallejo.
Index, blk. g., by Thad Stevens.....	Wm. Boots.....	Milpitas.
Leon, b. c., by Leinster.....	F. P. Lowell.....	Sacramento.
St. Patrick, s. g., by Hubbard.....	D. McGovern.....	Petaluma.

SUMMARY.

Index.....	1
Sid.....	2

Time—2:43½.

RACE NO. 19—TROTTING.

For named horses. Purse, \$250. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Mattie P, b. m., by Jackson Temple.....	D. Misner.....	Petaluma.
Flora B, br. m., by Whippleton.....	C. H. Crabb.....	Napa.
Don Marvin, br. s., by Fallis.....	F. P. Lowell.....	Sacramento.

SUMMARY.

Mattie P.....	3	1	1	1
Flora B.....	1	2	2	3
Don Marvin.....	2	3	3	2

Time—2:35; 2:31¼; 2:31; 2:36.

RACE No. 20—TROTTING.

For district 2:38 class. Purse, \$400. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Hernani, b. s., by Electioneer	J. H. White	 Lakeville.
Frank O'Neil, b. g., by Whippleton	James Corcoran	 Petaluma.
Economy, b. f., by Echo	B. C. Holly	 Vallejo.
Roena, by Echo	G. Pacheco	 Novato.
Burton, blk. g., by Naubue	C. W. Gardner	 Napa.
Annetto, b. m., by Anteo	M. O'Reily	 Petaluma.
Mambrino Chief, Jr., by Clark's Chief	Thomas Smith	 Vallejo.

SUMMARY.

Economy	1	1	1
Frank O'Neil	2	2	3
Hernani	3	3	2
Roena		dis.	
Burton		dis.	

Time—2:30 $\frac{1}{4}$; 2:33 $\frac{1}{2}$; 2:31 $\frac{1}{2}$.

TRANSACTIONS

OF THE

FIFTH DISTRICT AGRICULTURAL ASSOCIATION

For the Year 1888,

Composed of the Counties of San Mateo and Santa Clara.

OFFICERS OF THE ASSOCIATION.

E. TOPHAM	President.
G. H. BRAGG	Secretary.
W. D. TISDALE	Treasurer.

DIRECTORS.

E. TOPHAM ..	Milpitas.
J. W. REA	San José.
E. YOUNGER	San José.
G. B. POLHEMUS	San José.
S. N. RUCKER	San José.
H. H. MAIN	San José.
ALEX. GORDON	Redwood City.

REPORT.

SAN JOSÉ, October 10, 1888.

To the honorable the State Board of Agriculture:

GENTLEMEN: The Directors of the Fifth District Agricultural Association submit this, their report of the transactions of said association, for the year ending this date.

G. H. BRAGG, Secretary.

RECEIPTS AND EXPENDITURES.

Receipts.

Balance in hands of Treasurer	\$8 93	
Race entrances and forfeits	1,890 00	
Pool and park privileges	4,111 96	
Gate receipts	3,895 00	
State warrant	1,800 00	
		<u>\$11,705 89</u>

Expenditures.

National Trotting Association	\$81 00	
Lithograph posters	133 00	
Printing and advertising	578 35	
Paid in purses and stakes	5,881 00	
Paid in premiums	982 00	
Help and Secretary's salary	1,220 50	
Hay and straw	552 40	
Music	144 00	
Entrance money returned to Palo Alto Stock Farm (death of Lowell and Cedric)	20 00	
Bill posting	74 93	
Water	85 00	
Rent of grounds	900 00	
Sundry bills (tickets, books, etc.)	144 58	
Balance cash on hand	908 93	
		<u>\$11,705 89</u>

EXHIBITS AT THE FAIR—1888.

FIRST DEPARTMENT.

Name of Animal.	Owner.	Address.
CLASS I—THOROUGHBREDS—STALLIONS.		
Inauguration, four years old or over	William Boots	Milpitas.
Bob Wooding, four years old or over	William Boots	Milpitas.
Ben Hur, two years old	F. H. Burke	Menlo Park.
Dick, one year old	William Dwyer	San José.
Earthquake, one year old	H. C. Judson	Santa Clara.
Willie D, one year old	H. C. Judson	Santa Clara.
—, one year old	H. C. Judson	Santa Clara.
—, under one year	William Boots	Milpitas.
Bijou, under one year	C. Ouer	San José.
MARES.		
Gertser, four years old or over	H. C. Judson	Santa Clara.
—, four years old or over	H. C. Judson	Santa Clara.
Beauty, four years old or over	William Boots	Milpitas.
Glady, four years old or over	William Boots	Milpitas.
—, two years old	H. C. Judson	Santa Clara.
Vinctura, two years old	William Boots	Milpitas.
Installation, two years old	William Boots	Milpitas.
Ledette, two years old	William Boots	Milpitas.
Gladette, two years old	William Boots	Milpitas.
—, one year old	H. C. Judson	Santa Clara.
—, one year old	H. C. Judson	Santa Clara.
—, one year old	H. C. Judson	Santa Clara.
—, one year old	William Boots	Milpitas.
—, one year old	William Boots	Milpitas.
—, one year old	William Boots	Milpitas.
—, under one year	William Boots	Milpitas.
ROADSTERS—STALLIONS.		
Woodnut, four years old or over	James Weatherhead	San José.
Nutwood Boy, four years old or over	J. R. Buffington	San José.
Eros, four years old or over	F. H. Burke	Menlo Park.
Frank James, four years old or over	D. E. Gish	San José.
Baywood, four years old or over	E. S. Smith	San José.
Adventurer, four years old or over	Ben. E. Harris	San Francisco.
Hollywood, three years old	James Weatherhead	San José.
Peter, three years old	E. S. Smith	San José.
Hume H, two years old	D. J. Murphy	San José.
Robin Adair, two years old	A. O. Hooker	San José.
Woodbine, two years old	James Weatherhead	San José.
Almoone, Jr., two years old	J. Savidan	San José.
White Wings, one year old	George P. Bull	San José.
MARES.		
Lady Gray, four years old or over	A. O. Hooker	San José.
Lady Gem, four years old or over	I. C. Ballard	San José.
Daisy May, four years old or over	A. L. Chapman	Santa Clara.
Scrip, four years old or over	I. N. Thompson	Santa Clara.
Lady Nutwood, four years old or over	E. Topham	Milpitas.
Fearless, four years old or over	Ben. E. Harris	San Francisco.
Bopeep, three years old	George P. Bull	San José.
Daisy, three years old	W. S. Neal	Watsonville.
Wanda, three years old	F. H. Burke	Menlo Park.
Flora, three years old	James Weatherhead	San José.
Pearl, two years old	P. C. Waltenbaugh	Livermore.
Mariquita, two years old	F. H. Burke	Menlo Park.
Sylvia, one year old	E. Topham	Milpitas.
Lorena, one year old	Ben. E. Harris	San Francisco.
Harry Mac, gelding	Ben. E. Harris	San Francisco.

FIRST DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
SADDLE HORSE—MARE OR GELDING.		
Black Jack	C. Wade	San José.
Gypsy	I. N. Thompson	Santa Clara.
Aleck	I. N. Thompson	Santa Clara.
Scott	Ben. E. Harris	San Francisco.
CARRIAGE HORSES—MATCHED SPAN.		
Don and Harold	William Buckley	San José.
Allen and Bruce	Ben. E. Harris	San Francisco.
Padre and Rustler	William Boots	Milpitas.
ROADSTER TEAMS.		
Frank and Tom	L. Steiger	San José.
Lulu and Mattie	W. E. Goldsworthy	San José.
GRADED DRAFT—STALLIONS.		
Prince Albert, Jr., four years old or over	D. J. Murphy	San José.
Montezuma, three years old	George P. Bull	San José.
Sam, three years old	George Easton	Gilroy.
Ben, three years old	J. Carrick	Milpitas.
Grantshire, two years old	Mrs. R. Mathews	San José.
MARES.		
Clara, four years old or over	D. J. Murphy	San José.
Topsy, four years old or over	D. J. Murphy	San José.
Chub, four years old or over	George Easton	Gilroy.
Bessie, four years old or over	F. H. Burke	Menlo Park.
Norma, four years old or over	F. H. Burke	Menlo Park.
Coley, three years old	D. J. Murphy	San José.
Sally, two years old	D. J. Murphy	San José.
Chub, one year old	D. J. Murphy	San José.
Lottie, one year old	D. J. Murphy	San José.
Jess, one year old	F. H. Burke	Menlo Park.
SUCKLING COLTS.		
Ida	D. J. Murphy	San José.
Annie	D. J. Murphy	San José.
Bess	George Easton	Gilroy.
.....	F. H. Burke	Menlo Park.
.....	F. H. Burke	Menlo Park.
SUFFOLK PUNCH—STALLIONS.		
Pioneer, four years old	Robert Orr	Hollister.
Saulsbury, three years old	Robert Orr	Hollister.
FAMILIES.		
Inauguration, sire and five colts	Wm. Boots	Milpitas.
Bob Wooding, sire and five colts	Wm. Boots	Milpitas.
Beauty, dam and three colts	Wm. Boots	Milpitas.
Brown Maria, dam and three colts	Wm. Boots	Milpitas.
Woodnut, sire and five colts	James Weatherhead	San José.
Nutwood Boy, sire and eight colts	J. R. Buffington	San José.
Nellie Allen, dam and three colts	A. O. Hooker	San José.
Lady Nutwood, dam and three colts	E. Topham	San José.
Prince Albert, Jr., stallion and colt	D. J. Murphy	San José.
HORSES OF ALL WORK—STALLIONS.		
Dick Patchen, four years old or over	D. J. Murphy	San José.
Cal. Whalen, four years old or over	D. M. Ayers	San José.
Duke of Edinburgh, four years old or over	C. L. Fox	San José.
Echerson, four years old or over	Robert Orr	Hollister.
Kismet, three years old	George P. Bull	San José.
Frank B, three years old	I. C. Ballard	San José.
Acme, two years old	Evans Bros.	Milpitas.
Storm, two years old	Ben. E. Harris	San Francisco.
Buff, suckling colt	George P. Bull	San José.
Brentwood, suckling colt	Ben. E. Harris	San Francisco.
—, suckling colt	Wm. Boots	Milpitas.

TRANSACTIONS OF THE
FIRST DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
MARES.		
Sweetwood, four years old or over	Ben. E. Harris	San Francisco.
Nora, four years old or over	Wm. Boots	Milpitas.
Daphne, four years old or over	George P. Bull	San José.
Alice, four years old or over	George P. Bull	San José.
Phillis, four years old or over	George P. Bull	San José.
Maud, four years old or over	I. C. Ballard	San José.
DURHAM CATTLE—BULLS.		
Maxwell Chief, three years old or over	Bradley Ranch	San José.
Grand Prince of Baden, three years old or over	R. Ashburner	Baden.
3d Kirklevington of Forest Home, three years old or over	C. Younger & Son	San José.
5th Kirklevington of Forest Home, three years old or over	C. Younger & Son	San José.
26th Kirklevington of F. H., two years old	C. Younger & Son	San José.
Baden Duke 24th, one year old	R. Ashburner	Baden.
Colonel, one year old	R. Ashburner	Baden.
Laurel Airdrie 5th, one year old	R. Ashburner	Baden.
Baron Gwynne 12th, bull calf	R. Ashburner	Baden.
Oxford Duke 3d, bull calf	R. Ashburner	Baden.
Rosario, bull calf	R. Ashburner	Baden.
43d Kirklevington of F. H., bull calf	C. Younger & Son	San José.
COWS.		
Queen of the Valley and calf	Bradley Ranch	San José.
21st Rose of Forest Home and calf	C. Younger & Son	San José.
28th Rose of Forest Home and calf	C. Younger & Son	San José.
Constance B, three years old or over	Bradley Ranch	San José.
Minstrel Gwynne 2d, three years old or over	R. Ashburner	Baden.
Red Rose of Cedar 3d, three years old or over	R. Ashburner	Baden.
Pansy 17th, three years old or over	R. Ashburner	Baden.
Jessie Maynard 3d, three years old or over	C. Younger & Son	San José.
4th Belle of Forest Home, three years old or over	C. Younger & Son	San José.
Laura B, two years old	Bradley Ranch	San José.
Lady Jane, two years old	Bradley Ranch	San José.
Adeline, two years old	R. Ashburner	Baden.
Jessie Maynard 4th, two years old	C. Younger & Son	San José.
Amelia 12th, two years old	C. Younger & Son	San José.
Fannie B, one year old	Bradley Ranch	San José.
Rose B, one year old	Bradley Ranch	San José.
Queen of the Meadow, one year old	Bradley Ranch	San José.
Oxford London Duchess 2d, one year old	R. Ashburner	Baden.
Oxford Rose 11th, one year old	C. Younger & Son	San José.
Nevada Belle 8th, one year old	C. Younger & Son	San José.
—, heifer calf	Bradley Ranch	San José.
Golden Pippin 15th, heifer calf	R. Ashburner	Baden.
Oxford Rose 12th, heifer calf	C. Younger & Son	San José.
HEREFORD CATTLE—COWS.		
Miss Gaudy, one year old	F. H. Burke	Menlo Park.
JERSEY CATTLE—BULLS.		
Prince, three years old or over	George B. Polhemus	Coyote.
Eugene, one year old	George B. Polhemus	Coyote.
Bob, bull calf	George B. Polhemus	Coyote.
COWS.		
Katie Felton and May, cow and calf	George B. Polhemus	Coyote.
Cherry 2d, three years old or over	George B. Polhemus	Coyote.
Jersey Lily, three years old or over	George B. Polhemus	Coyote.
Jane Mead, two years old	George B. Polhemus	Coyote.

FIRST DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
HOLSTEIN CATTLE—BULLS.		
Romley, three years old or over	George B. Polhemus	Coyote.
Ansonia, three years old or over	George B. Polhemus	Coyote.
Cortez, two years old	F. H. Burke	Menlo Park.
Egmond Pride, one year old	George B. Polhemus	Coyote.
Royal Son, one year old	George B. Polhemus	Coyote.
Major Egmond, bull calf	George B. Polhemus	Coyote.
Greet Van Diepen's R. P., bull calf	George B. Polhemus	Coyote.
COWS.		
Rebecca Egmond and calf	George B. Polhemus	Coyote.
Aut Poel and calf	George B. Polhemus	Coyote.
Prince of Twisk's Laura and calf	F. H. Burke	Menlo Park.
Greet Boots, three years old or over	George B. Polhemus	Coyote.
Greet Van Diepen, three years old or over	George B. Polhemus	Coyote.
Aggie Lelia 3d, three years old or over	F. H. Burke	Menlo Park.
Fanje 2d, two years old	George B. Polhemus	Coyote.
Aut Poel 2d, two years old	George B. Polhemus	Coyote.
Chrysanthemum, two years old	F. H. Burke	Menlo Park.
Korvertje 3d, two years old	F. H. Burke	Menlo Park.
Betje Egmond 3d, one year old	George B. Polhemus	Coyote.
Lady Brackenhoff, heifer calf	George B. Polhemus	Coyote.
Lizzie Blacker, heifer calf	George B. Polhemus	Coyote.
ANGUS OR GALLOWAYS—COWS.		
Daisy, three years old or over	F. H. Burke	Menlo Park.
Bonnie Bluebell, two years old	F. H. Burke	Menlo Park.
GRADED CATTLE—COWS.		
Saxe, three years old or over	George B. Polhemus	Coyote.
June Rose, three years old or over	R. Ashburner	Baden.
Rose, three years old or over	I. N. Thompson	Santa Clara.
Queen, three years old or over	I. N. Thompson	Santa Clara.
Cactus, two years old	R. Ashburner	Baden.
Marmalade, one year old	R. Ashburner	Baden.
HERDS FOR BEEF PURPOSES.		
Maxwell Chief, Mabel B, Constance B, Bettie B, Lady Howard	Bradley Ranch	San José.
Grand Prince of Baden, Minstrel Gwynne 2d, Adeline, Red Rose of Cedar 3d, Pansy 17th	R. Ashburner	Baden.
3d Kirklevington of F. H., Jessie Maynard 4th, Jessie Maynard 3d, 4th Belle of For- est Home, Amelia 12th	C. Younger & Son	San José.
HERDS FOR DAIRY PURPOSES.		
Romley, Rebecca Egmond, Aut Poel, Ger- tje Boots, Greet Van Diepen, Anna Eg- mond, Pansje Veerman, Betje Egmond	George B. Polhemus	Coyote.
Prince, Cherry 2d, Jersey Maid, Katie Fel- ton, Jersey Lily, Fairy 4th, Lady Mac Cortez, Prince of Twisk's Laura, Aggie Lelia 3d, Korvertje 3d, Chrysanthemum	George B. Polhemus	Coyote.
	F. H. Burke	Menlo Park.
HERD OF ANY BREED OR AGE.		
Grand Prince of Baden, Minstrel Gwynne 2d, Red Rose of Cedar, Pansy 17th, Ade- line	R. Ashburner	Baden.
3d Kirklevington of F. H., Jessie Maynard 3d, Jessie Maynard 4th, 4th Belle of F. H., Amelia 12th	C. Younger & Son	San José.
Romley, Rebecca Egmond, Aut Poel, Gertje Boots, Geest Van Diepen, Anna Egmond, Pansje Veerman, Betje Eg- mond	George B. Polhemus	Coyote.

TRANSACTIONS OF THE
FIRST DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
SWEEPSTAKES—(ANY AGE OR BREED)—BULLS.		
Ansonia	George B. Polhemus	Coyote.
Maxwell Chief	Bradley Ranch	San José.
Grand Prince of Baden	R. Ashburner	Baden.
3d Kirklevington of Forest Home	C. Younger & Son	San José.
5d Kirklevington of Forest Home	C. Younger & Son	San José.
26th Kirklevington of Forest Home	C. Younger & Son	San José.
Cortez	F. H. Burke	Menlo Park.
COWS.		
Rebecca Egmond	George B. Polhemus	Coyote.
Minstrel Gwynne 2d	R. Ashburner	Baden.
Red Rose of Cedar	R. Ashburner	Baden.
Jessie Maynard 3d	C. Younger & Son	San José.
Jessie Maynard 4th	C. Younger & Son	San José.
Oxford Rose 11th	C. Younger & Son	San José.
4th Belle of Forest Home	C. Younger & Son	San José.
Aggie Lelia 2d	F. H. Burke	Menlo Park.
Bonnie Bluebell	F. H. Burke	Menlo Park.
SHEEP.		
Terry, Merino ram	H. C. Agnew	Agnews.
Jennie, Merino ewe	H. C. Agnew	Agnews.
Aeth, Merino ewe	H. C. Agnew	Agnews.
Pen of three Merino ram lambs	H. C. Agnew	Agnews.
Pen of five Merino ewe lambs	H. C. Agnew	Agnews.
Just Right, Cotswold ram	C. Younger & Son	San José.
—, Cotswold ewe	C. Younger & Son	San José.
Pen of three Cotswold ram lambs	C. Younger & Son	San José.
GOATS.		
—, Angora buck	C. P. Bailey	San José.
Pen of three Angora kids	C. P. Bailey	San José.
Pen of five Angora does	C. P. Bailey	San José.
POULTRY.		
One pair of Plymouth Rock fowls	O. J. Albee	Lawrence.
One pair of Plymouth Rock chicks	O. J. Albee	Lawrence.
One pair of Plymouth Rock chicks	O. J. Albee	Lawrence.
One pair of Partridge Cochins fowls	O. J. Albee	Lawrence.
One pair of Partridge Cochins chicks	O. J. Albee	Lawrence.
One pair of Partridge Cochins chicks	O. J. Albee	Lawrence.
One pair of Langshan fowls	O. J. Albee	Lawrence.
One pair of Langshan chicks	O. J. Albee	Lawrence.
One pair of Langshan chicks	O. J. Albee	Lawrence.
One pair of Seabright Bantam fowls	Wm. Fischer	San José.
One pair of Seabright Bantam chicks	Wm. Fischer	San José.
One pair of Seabright Bantam chicks	Wm. Fischer	San José.
One pair of Brown Leghorn fowls	O. J. Albee	Lawrence.
One pair of Brown Leghorn chicks	O. J. Albee	Lawrence.
One pair of Brown Leghorn chicks	O. J. Albee	Lawrence.
One pair of Laced Wyandotte fowls	O. J. Albee	Lawrence.
One pair of Laced Wyandotte chicks	O. J. Albee	Lawrence.
One pair of White Wyandotte chicks	O. J. Albee	Lawrence.
One pair of White Langshan chicks	O. J. Albee	Lawrence.
One pair of White Plymouth Rock chicks	O. J. Albee	Lawrence.
One pair of Seabright Speckled Bantam fowls	Wm. Fischer	San José.
Best and largest collection of poultry	O. J. Albee	Lawrence.

PREMIUMS AWARDED—1888.

FIRST DEPARTMENT.

Name of Animal.	Exhibitor.	Address.	Award.
THOROUGHBREDS—STALLIONS.			
Bob Wooding, four years old or over	Wm. Boots	Milpitas	\$15 00
Inauguration, four years old or over ..	Wm. Boots	Milpitas	\$8 00
Willie D, one year old	H. C. Judson	Santa Clara	\$5 00
Earthquake, one year old	H. C. Judson	Santa Clara	\$3 00
—, under one year	Wm. Boots	Milpitas	\$5 00
Bijou, under one year	C. Ouer	San José	\$2 00
MARES.			
Beauty, four years old or over	Wm. Boots	Milpitas	\$12 00
Gertser, four years old or over	H. C. Judson	Santa Clara	\$6 00
Vinctura, two years old	Wm. Boots	Milpitas	\$5 00
—, two years old	H. C. Judson	Santa Clara	\$3 00
—, one year old	H. C. Judson	Santa Clara	\$4 00
—, one year old	H. C. Judson	Santa Clara	\$2 00
—, under one year	Wm. Boots	Milpitas	\$4 00
ROADSTERS—STALLIONS.			
Eros, four years old or over	F. H. Burke	Menlo Park	\$10 00
Baywood, four years old or over	E. S. Smith	San José	\$5 00
Peter, three years old	E. S. Smith	San José	\$5 00
Hollywood, three years old	Jas. Weatherhead	San José	\$3 00
Robin Adair, two years old	A. O. Hooker	San José	\$4 00
Almoone, Jr., two years old	J. Savidan	San José	\$2 00
Whitewings, one year old	Geo. P. Bull	San José	\$2 00
MARES.			
Fearless, four years old or over	Ben. E. Harris	San Francisco	\$8 00
Lady Nutwood, four years old or over ..	E. Topham	Milpitas	\$4 00
Wanda, three years old	F. H. Burke	Menlo Park	\$5 00
Bopeep, three years old	Geo. P. Bull	San José	\$3 00
Mariquita, two years old	F. H. Burke	Menlo Park	\$4 00
Pearl, two years old	P. C. Waltenbaugh	Livermore	\$2 00
Sylvia, one year old	E. Topham	Milpitas	\$2 00
GELDINGS.			
Harry Mac	Ben. E. Harris	San Francisco	\$10 00
SADDLE HORSES—MARES OR GELDINGS.			
Scott	Ben. E. Harris	San Francisco	\$5 00
Black Jack	C. Wade	San José	\$2 00
CARRIAGE TEAMS.			
Don and Harold, matched team	Wm. Buckley	San José	\$15 00
Allen and Bruce, matched team	Ben. E. Harris	San Francisco	\$10 00
Lulu and Mattie, roadster team	W. E. Goldsworthy	San José	\$10 00
Frank and Tom, roadster team	L. Steiger	San José	\$5 00
GRADED DRAFT HORSES—STALLIONS.			
Prince Albert, four years old or over ..	D. J. Murphy	San José	\$10 00
Montezuma, three years old	Geo. P. Bull	San José	\$6 00
Sam, three years old	Geo. Easton	Gilroy	\$3 00
Grantshire, two years old	Mrs. R. Mathews	San José	\$5 00
MARES.			
Clara, four years old or over	D. J. Murphy	San José	\$8 00
Norma, four years old or over	F. H. Burke	Menlo Park	\$4 00
Coley, three years old	D. J. Murphy	San José	\$5 00
Sally, two years old	D. J. Murphy	San José	\$4 00
Chub, one year old	D. J. Murphy	San José	\$3 00
Ida, suckling colt	D. J. Murphy	San José	\$2 00

FIRST DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
SUFFOLK PUNCH—STALLIONS.			
Pioneer, four years old	Robert Orr	Hollister	Medal.
Saulsbury, three years old	Robert Orr	Hollister	Medal.
FAMILIES.			
Bob Wooding, sire and five colts	Wm. Boots	Milpitas	\$20 00
Inauguration, sire and five colts	Wm. Boots	Milpitas	\$10 00
Beauty, dam and three colts	Wm. Boots	Milpitas	\$10 00
Brown Maria, dam and three colts	Wm. Boots	Milpitas	\$5 00
Woodnut, sire and five colts	Jas. Weatherhead	San José	\$15 00
Nutwood Boy, sire and five colts	J. R. Buffington	San José	\$8 00
Lady Nutwood, dam and three colts	E. Topham	Milpitas	\$10 00
Nellie Allen, dam and three colts	Dr. A. O. Hooker	San José	\$5 00
Prince Albert, sire and seven colts	D. J. Murphy	San José	\$10 00
HORSES OF ALL WORK—STALLIONS.			
Echerson, four years old or over	Robert Orr	Hollister	\$10 00
Dick Patchen, four years old or over	D. J. Murphy	San José	\$5 00
Frank B, three years old	I. C. Ballard	San José	\$6 00
Kismet, three years old	Geo. P. Bull	San José	\$3 00
Acme, two years old	Evans Bros.	Milpitas	\$4 00
Storm, two years old	Ben. E. Harris	San Francisco	\$2 00
Brentwood, suckling colt	Ben. E. Harris	San Francisco	\$2 00
MARES.			
Sweetwood, four years old or over	Ben. E. Harris	San Francisco	\$8 00
Alice, four years old or over	Geo. P. Bull	San José	\$4 00
Phillis, three years old	Geo. P. Bull	San José	\$5 00
Maud, suckling colt	I. C. Ballard	San José	\$2 00
DURHAM CATTLE—BULLS.			
5th Kirklevington of Forest Home, three years old or over	C. Younger & Son	San José	\$15 00
3d Kirklevington of Forest Home, three years old or over	C. Younger & Son	San José	\$8 00
26th Kirklevington of Forest Home, two years old	C. Younger & Son	San José	\$10 00
Baden Duke 24th, one year old	R. Ashburner	Baden	\$5 00
Colonel, one year old	R. Ashburner	Baden	\$3 00
Baron Gwynne 12th, bull calf	R. Ashburner	Baden	\$4 00
43d Kirklevington of Forest Home, bull calf	C. Younger & Son	San José	\$2 00
COWS.			
21st Rose of Forest Home and calf	C. Younger & Son	San José	\$10 00
Queen of the Valley and calf	Bradley Ranch	San José	\$5 00
4th Belle of Forest Home, three years old or over	C. Younger & Son	San José	\$10 00
Pansy 17th, three years old or over	R. Ashburner	Baden	\$5 00
Amelia 12th, two years old	C. Younger & Son	San José	\$8 00
Jessie Maynard 4th, two years old	C. Younger & Son	San José	\$4 00
Oxford Rose 11th, one year old	C. Younger & Son	San José	\$5 00
Fannie B, one year old	Bradley Ranch	San José	\$3 00
Oxford Rose 12th, heifer calf	C. Younger & Son	San José	\$3 00
Golden Pippin 15th, heifer calf	R. Ashburner	Baden	\$2 00
HEREFORD CATTLE—COWS.			
Miss Gaudy, one year old	F. H. Burke	Menlo Park	\$5 00
JERSEY CATTLE—BULLS.			
Prince, three years old or over	Geo. B. Polhemus	Coyote	\$15 00
Eugene, one year old	Geo. B. Polhemus	Coyote	\$5 00
Bob, bull calf	Geo. B. Polhemus	Coyote	\$4 00
COWS.			
Katie Felton and calf	Geo. B. Polhemus	Coyote	\$10 00
Cherry 2d, three years old or over	Geo. B. Polhemus	Coyote	\$10 00
Jersey Lily, three years old or over	Geo. B. Polhemus	Coyote	\$5 00
Jane Mead, two years old	Geo. B. Polhemus	Coyote	\$8 00

FIRST DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
HOLSTEIN CATTLE—BULLS.			
Romley, three years old or over	Geo. B. Polhemus	Coyote	\$15 00
Ansonia, three years old or over	Geo. B. Polhemus	Coyote	\$8 00
Cortez, two years old	F. H. Burke	Menlo Park	\$10 00
Egmond Pride, one year old	Geo. B. Polhemus	Coyote	\$5 00
Royal Son, one year old	Geo. B. Polhemus	Coyote	\$3 00
Major Egmond, bull calf	Geo. B. Polhemus	Coyote	\$4 00
Greet Van Diepen's Royal Prince, bull calf	Geo. B. Polhemus	Coyote	\$2 00
COWS.			
Rebecca Egmond and calf	Geo. B. Polhemus	Coyote	\$5 00
Aut Poel and calf	Geo. B. Polhemus	Coyote	\$10 00
Gerje Boots, three years old or over	Geo. B. Polhemus	Coyote	\$10 00
Greet Van Diepen, three years old or over	Geo. B. Polhemus	Coyote	\$5 00
Chrysanthemum, two years old	F. H. Burke	Menlo Park	\$8 00
Aut Poel 2d, two years old	Geo. B. Polhemus	Coyote	\$4 00
Betje Egmond 3d, one year old	Geo. B. Polhemus	Coyote	\$5 00
Lady Brackenhoff, heifer calf	Geo. B. Polhemus	Coyote	\$3 00
Lizzie Blacker, heifer calf	Geo. B. Polhemus	Coyote	\$2 00
ANGUS OR GALLOWAYS—COWS.			
Bonnie Bluebell, three years old or over	F. H. Burke	Menlo Park	\$10 00
Daisy, three years old or over	F. H. Burke	Menlo Park	\$5 00
GRADED CATTLE—COWS.			
Saxe, three years old or over	Geo. B. Polhemus	Coyote	\$8 00
June Rose, three years old or over	R. Ashburner	Baden	\$4 00
Cactus, two years old	R. Ashburner	Baden	\$5 00
Marmalade, one year old	R. Ashburner	Baden	\$3 00
HERDS—FOR BEEF PURPOSES.			
3d Kirklevington of Forest Home, Jessie Maynard 4th, Jessie Maynard 3d, 4th Belle of Forest Home, Amelia 12th	C. Younger & Son.	San José	\$15 00
Grand Prince of Baden, Minstrel Gwynne 2d, Pansy 17th, Red Rose of Cedar, Adeline	R. Ashburner	Baden	\$8 00
FOR DAIRY PURPOSES.			
Romley, Rebecca Egmond, Aut Poel, Gertje Boots, Greet Van Diepen, Anna Egmond, Pansje Veerman, Betje Egmond	Geo. B. Polhemus	Coyote	\$15 00
Cortez, Aggie Lelia 2d, Prince of Twisk's Laura, Korvertje 3d, Chrysanthemum	F. H. Burke	Menlo Park	\$ 800
HERDS OF ANY BREED OR AGE.			
Grand Prince of Baden 2d, Minstrel Gwynne 2d, Red Rose of Cedar, Pansy 17th, Adeline	R. Ashburner	Baden	\$15 00
3d Kirklevington of Forest Home, Jessie Maynard 3d, Jessie Maynard 4th, 7th Belle of Forest Home, Amelia 12th	C. Younger & Son.	San José	\$8 00
SWEEPSTAKES—(ANY BREED OR AGE)—BULLS.			
3d Kirklevington of Forest Home	C. Younger & Son.	San José	\$15 00
COWS.			
Minstrel Gwynne 2d	R. Ashburner	Baden	\$15 00
SHEEP.			
Terry, Merino ram	H. C. Agnew	Agnews	\$6 00
Jennie, Merino ewe	H. C. Agnew	Agnews	\$6 00
Althea, Merino ewe	H. C. Agnew	Agnews	\$3 00
Pen of three ram lambs	H. C. Agnew	Agnews	\$5 00
Pen of five ewe lambs	H. C. Agnew	Agnews	\$5 00
Just Right, Cotswold ram	C. Younger & Son	San José	\$6 00
—, Cotswold ewe	C. Younger & Son.	San José	\$6 00

FIRST DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
GOATS.			
Angora buck	C. P. Bailey	San José	\$6 00
Pen of three Angora kids	C. P. Bailey	San José	\$5 00
Pen of five Angora does	C. P. Bailey	San José	\$5 00
POULTRY.			
One pair of Plymouth Rock fowls	O. J. Albee	Lawrence	\$2 00
One pair of Plymouth Rock chicks	O. J. Albee	Lawrence	\$2 00
One pair of Plymouth Rock chicks	O. J. Albee	Lawrence	\$1 00
One pair of Partridge Cochins fowls	O. J. Albee	Lawrence	\$2 00
One pair of Partridge Cochins chicks	O. J. Albee	Lawrence	\$2 00
One pair of Partridge Cochins chicks	O. J. Albee	Lawrence	\$1 00
One pair of Langshan fowls	O. J. Albee	Lawrence	\$2 00
One pair of Langshan chicks	O. J. Albee	Lawrence	\$2 00
One pair of Brown Leghorn fowls	O. J. Albee	Lawrence	\$2 00
One pair of Brown Leghorn chicks	O. J. Albee	Lawrence	\$2 00
One pair of Brown Leghorn chicks	O. J. Albee	Lawrence	\$1 00
One pair of Laced Wyandotte fowls	O. J. Albee	Lawrence	\$2 00
One pair of Laced Wyandotte chicks	O. J. Albee	Lawrence	\$2 00
One pair of White Wyandotte chicks	O. J. Albee	Lawrence	\$2 00
One pair of White Langshan chicks	O. J. Albee	Lawrence	\$2 00
One pair of White Plymouth Rock chicks	O. J. Albee	Lawrence	\$2 00
One pair of Seabright Bantam fowls	Wm. Fischer	San José	\$2 00
One pair of Seabright Bantam chicks	Wm. Fischer	San José	\$2 00
One pair of Seabright Bantam chicks	Wm. Fischer	San José	\$1 00
One pair of Seabright Speckled fowls	Wm. Fischer	San José	\$2 00
Best and largest collection of poultry	O. J. Albee	Lawrence	\$10 00

AGRICULTURAL DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
AGRICULTURAL IMPLEMENTS, ETC.			
Display of agricultural implements	B. Griswold	San José	\$20 00
Hay and straw cutter	B. Griswold	San José	Diploma.
Gangplow	B. Griswold	San José	\$10 00
Sidehill plow	B. Griswold	San José	\$5 00
Vineyard and orchard plow	B. Griswold	San José	\$5 00
Open ditching plow	B. Griswold	San José	\$5 00
Plow for all purposes	B. Griswold	San José	\$5 00
CARRIAGES AND BUGGIES.			
Two-horse family carriage, with top	B. Griswold	San José	\$10 00
One-horse family carriage, with top	B. Griswold	San José	\$5 00
Top buggy	B. Griswold	San José	\$5 00
Open buggy	B. Griswold	San José	\$5 00
Two-seated surrey	B. Griswold	San José	\$5 00
Fruit wagon	B. Griswold	San José	\$5 00
Driving cart	B. Griswold	San José	\$5 00
Ladies' phaeton	B. Griswold	San José	\$5 00
Delivery wagon	B. Griswold	San José	\$5 00
AGRICULTURAL PRODUCTS.			
Bread corn	A. L. Chapman	Santa Clara	\$3 00

SPEED PROGRAMME.

MONDAY, SEPTEMBER 24, 1888.

RACE NO. 1—BUGGY RACE.

Free purse, seventy-five dollars; fifty dollars to first horse; twenty-five dollars to second horse. Horses to be eligible to this class must have been used exclusively for buggy purposes. Owners to drive. Mile and repeat. The Board reserves the right to reject any and all entries. Entries close Saturday, September twenty-second.

Name and Pedigree of Horse.	By Whom Entered.	Address.
X E B, b. g.	X. E. Burns.	San José.
Pilot, b. g.	W. L. Appleby.	Santa Clara.
Billy Dixie.	H. C. Ahlers.	San José.
Old Sport, bux. g.	James Howard.	San José.
Pink, b. m.	Geo. Glendenning.	San José.

SUMMARY.

Old Sport.	1	1
X E B.	2	2
Billy Dixie.	3	3
Pink.	4	4
Pilot.	5	5

Time—2:47½; 2:42½.

SPECIAL STALLION RACE—TROTTING.

Purse, three hundred and fifty dollars. Mile heats; three in five; to harness.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Bismarck, s. s., by Index.	J. W. Gordon.	San José.
Pedro, b. s., by Dan Voorhies.	L. Simmonds.	Stockton.
Argent, b. s., by Sterling.	R. H. Walton.	San José.
Guy Davis, by Erwin Davis.	J. M. Ayers.	Oakland.
Ross S, by Nutwood.	Sargent Bros.	Sargents.

SUMMARY.

Argent.	1	1	1
Bismarck.	2	2	2
Pedro.	3	3	3
Guy Davis.	dis.		

Time—2:30½; 2:29¼; 2:30.

TUESDAY, SEPTEMBER 25, 1880.

RACE No. 2—TROTTING.

2:35 Class. Purse, \$400. Mile heats; three in five; to harness.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Ben Ali, by Geo. M. Patchen, Jr.	J. A. Goldsmith	San Mateo.
Sonnet, by Bentonian	Palo Alto Stock Farm.	San Mateo.
Maggie E, by Nutwood	S. B. Emerson	Mountain View.

SUMMARY.

Ben Ali	1	1	2	2	1
Maggie E	2	2	1	1	2
Sonnet	3	3	3	3	

Time—2:28; 2:22; 2:23; 2:19 $\frac{3}{4}$; 2:23.

SPECIAL RACE—TROTTING.

Purse, five hundred dollars. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Rosie Mc, b. m., by Button	J. A. Goldsmith	San Mateo.
San Diego, b. g., by Victor	H. C. Airhart	San Diego.
Franklin, blk. g., by General Reno	J. W. Donathan	San José.

SUMMARY.

Franklin	1	3	1	3	1
Rosie Mc	2	1	2	1	2
San Diego	3	2	3	2	3

Time—2:23; 2:24; 2:23; 2:21 $\frac{1}{2}$; 2:21.

RACE No. 3—TROTTING.

Garden City Colt Stake. Mile heats; three in five; to harness.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Direct, blk. c., by Director	Pleasanton St'k Farm.	Pleasanton.
Grandee, b. g., by Le Grande	San Mateo St'k Farm.	San Mateo.
Anselma, c. f., by Ansel	Palo Alto Stock Farm.	San Mateo.
Monteith, by Electioneer	Palo Alto Stock Farm.	San Mateo.

Grandee made a walkover for the entrance money.

RACE No. 4—TROTTING.

Santa Clara County Colt Stake. Two-year olds. Mile heats; two in three; to harness.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Ario, br. c., by Florida	James Boyd	San José.
Robin Adair, br. c., by Orion	A. O. Hooker	San José.
Almoone, Jr., s. c., by Almoone	J. Savidan	San José.
Mariquita, b. f., by Eros	W. H. Vioget	Santa Clara.
Nutgrove, b. c., by Grosvenor	E. Topham	Milpitas.
Rockwood, b. c., by Woodnut	C. H. Corey	San José.
Culett, b. f., by Eros	W. H. Seale	Mayfield.
Bonnie B, b. c., by Nutwood Boy	J. R. Buffington	San José.

SUMMARY.

Robin Adair	1	1
Rockwood	2	2
Nutgrove	3	3

Time—3:14 $\frac{3}{4}$; 3:10.W. H. Vioget trotted his colt Mariquita for a record. Time, 2:46 $\frac{1}{2}$.

WEDNESDAY, SEPTEMBER 26, 1888.

RACE No. 5—RUNNING.

For two-year olds. Three quarters of a mile.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Bessie Shannon, b. f., by Shannon	John Reavy & Co.	San Francisco.
Aurelia, ch. f., by Wildidle	Palo Alto Stock Farm	San Mateo.
Faustine, b. f., by Flood	Palo Alto Stock Farm	San Mateo.
Naicho B, s. g., by Wanderer	P. L. Donalach	Los Angeles.
Wild Oats, b. c., by Wildidle	W. L. Appleby	Santa Clara.
Futurity, blk. f., by John Adams	W. L. Appleby	Santa Clara.
Four Aces, s. c., by Hockhocking	J. D. Dunn	Los Angeles.
Odette, ch. f., by Shiloh	B. P. Hill	El Cajon.

SUMMARY.

Faustine	1
Aurelia	2
Bessie Shannon	3
Wild Oats	4
Futurity	5

Time—1:16.

RACE No. 6—RUNNING.

Free purse. Two hundred dollars; fifty dollars to second horse. One and one eighth miles.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Daisy D, b. m., by Wheatly	Bruce Cockrell	Salinas.
Welcome, br. m., by Warwick	D. Hennessey	Sacramento.
Idalene Cotton, ch. f., by Jim Brown	Maltese Villa Stables	Sacramento.
Nancy, ch. f., by Jim Brown	B. C. Holly	Vallejo.
Brutus, b. c., by McGregor	Palo Alto Stock Farm	San Mateo.
Del, blk. g., by Falsetto	P. C. Donalach	Los Angeles.
Carmen, ch. f., by Wildidle	W. L. Appleby	Santa Clara.
Carmelito, b. m., by Hardwood	B. P. Hill	El Cajon.

SUMMARY.

Daisy D.....	1
Welcome.....	2
Carmen.....	3
Nancy.....	4

Time—1:57.

RACE NO. 8—TROTTING.

Purse, six hundred dollars. Mile heats; best three in five; to harness.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Perihelion, b. s., by Admiral.....	W. L. Ray.....	San Francisco.
Economy, b. f., by Echo.....	B. C. Holly.....	Vallejo.
Dubec, b. g., by Sultan.....	L. J. Rose.....	Los Angeles.
The Dude, ch. g., by Golddust.....	J. R. Hodson.....	Sacramento.
Lady Escott, ch. m., sire unknown.....	J. A. Dustin.....	Oakland.

SUMMARY.

Perihelion.....	2	1	1	1
Lady Escott.....	1	2	2	2

Time—2:34; 2:28; 2:35; 2:32½.

THURSDAY, SEPTEMBER 27, 1888.

RACE NO. 9—RUNNING.

Free purse, two hundred dollars. Fifty dollars to second horse. Mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Elwood, ch. g., by Norfolk.....	Maltese Villa Stables.....	Sacramento.
Fusillade's Last, ch. f., by John W. Norton.....	B. C. Holly.....	Vallejo.
Not Idle, ch. f., by Wildidle.....	W. L. Appleby.....	Santa Clara.

SUMMARY.

Not Idle.....	1	1
Fusillade's Last.....	2	2

Time—1:45; 1:47.

RACE NO. 10—TROTTING.

Purse, five hundred dollars. Mile heats; best three in five; to harness.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Ben Ali, b. g., by George M. Patchen, Jr.....	John A. Goldsmith.....	San Mateo.
Bonanza, s. s., by Arthurton.....	R. J. Havey.....	San Francisco.
Express, b. g., by Electioneer.....	Palo Alto Stock Farm.....	San Mateo.
Artist, blk. g., by McCracken's Golddust.....	J. R. Hodson.....	Sacramento.
Franklin, blk. g., by General Reno.....	Chas. Davis.....	Oakland.
Eros, b. s., by Electioneer.....	W. H. Vioget.....	Santa Clara.

SUMMARY.

Franklin	1	1	1
Ben Ali	2	2	2

Time—2:25; 2:25; 2:25.

RACE No. 11—TROTTING.

Purse, six hundred dollars. 2:22 Class.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Thapsin, blk. g., by Berlin	E. H. Miller, Jr.	San Francisco.
Gus Wilkes, br. g., by Mambrino Wilkes	J. A. Dustin	Oakland.
Lillie Stanley, b. m., sire unknown	O. A. Hickok	San Francisco.
Rosie Mc, b. m., sire unknown	John A. Goldsmith	San Francisco.

SUMMARY.

Lillie Stanley	1	4	2	1	1
Gus Wilkes	3	1	1	2	2
Thapsin	2	3	4	3	3
Rosie Mc	4	2	3	4	4

Time—2:21; 2:23½; 2:23; 2:23; 2:22.

FRIDAY, SEPTEMBER 28, 1888.

RACE No. 12—RUNNING.

For three-year olds; ten dollars forfeit; two hundred dollars added; fifty dollars to second horse; twenty-five dollars to third. One and one fourth miles.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Vinco, b. g., by Bob Wooding	Wm. Boots	Milpitas.
Welcome, br. m., by Warwick	D. Hennessey	Sacramento.
Brutus, b. c., by McGregor	Palo Alto Stock Farm	San Mateo.
Del, blk. g., by Falsetto	P. C. Donalach	Los Angeles.
Carmen, ch. f., by Wildidle	W. L. Appleby	Santa Clara.

SUMMARY.

Welcome	1
Carmen	2
Vinco	3

Time—2:11½.

RACE No. 13—RUNNING.

For all ages. Twenty-five dollars forfeit; two hundred and fifty dollars added; one hundred dollars to second horse; third to save entrance. One and one half miles.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Index, blk. g., by Thad Stevens	Wm. Boots	Milpitas.
Peel, b. c., by Monday	Palo Alto Stock Farm	San Mateo.
Four Aces, s. c., by Hockhocking	J. D. Dunn	Los Angeles.
Laura Gardner, ch. f., by Jim Brown	W. L. Appleby	Santa Clara.
Carmelita, b. m., by Hardwood	B. P. Hill	El Cajon.
John Treat, g. g., by Shiloh	B. P. Hill	El Cajon.

SUMMARY.

Laura Gardner.....	1
Index	2

Time—2:38½.

RACE No. 14—PACING.

Purse, four hundred dollars. Mile heats; best three in five; to harness.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Belmont Boy, s. g., by Nutwood.....	C. S. Roberts	San José.
Almont Patchen, br. s., by Juanito.....	W. M. Billups	Colusa.
Little Hope, ch. g., by Tempest	W. B. Bradbury.....	San Francisco.
Damiana, s. g., by Admiral	L. E. Clawson	San Francisco.
Goldleaf, ch. f., by Sidney	Pleasant'n Stock Farm	Pleasanton.
Ned Winslow, blk. g., by Tom Benton.....	J. L. McCord.....	Sacramento.
San Diego, b. g., by Victor	H. C. Airhart	San Diego.

SUMMARY.

Belmont Boy.....	1	1	1
Almont Patchen	2	2	2
San Diego.....	3	3	3

Time—2:19¾; 2:19¾; 2:20.

RACE No. 15—TROTTING.

Vendome Colt Stakes. For two-year olds. One mile heats; best two in three; to harness.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Margaret S, b. f., by Director	Pleasant'n Stock Farm	Pleasanton.
Coin, b. c., by Electioneer	Palo Alto Stock Farm	San Mateo.
Leon, b. c., by Electioneer	Palo Alto Stock Farm	San Mateo.
Sunol, b. f., by Electioneer	Palo Alto Stock Farm	San Mateo.
Palo Alto Belle, b. f., by Electioneer.....	Palo Alto Stock Farm	San Mateo.
Jet Wilkes, blk. f., by Guy Wilkes.....	San Mateo Stock Farm	San Mateo.
Fortuna, b. f., by Florida	J. W. Knox	Pleasanton.

Fortuna made a walkover for entrance money.

SPECIAL RACE—TROTTING.

Purse, two hundred dollars. Mile heats; two in three; to harness.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Vesolia, b. f., by Stamboul.....	L. J. Rose	Los Angeles.
Fortuna, b. f., by Florida.....	J. W. Knox	Pleasanton.

SUMMARY.

Fortuna.....	2	1	1
Vesolia.....	1	2	2

Time—2:30; 2:31; 2:31.

MATCH RACE.

One hundred dollars a side. Mile heats; best two in three; to harness.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Robin Adair, b. c., by Orion.....	A. O. Hooker.....	San José.
Rockwood, b. c., by Woodnut.....	C. H. Corey.....	San José.

SUMMARY.

Robin Adair	2	1	1
Rockwood	1	2	2

Time—3:25; 3:16; 3:16.

SATURDAY, SEPTEMBER 29, 1888.

RACE No. 16—RUNNING, ALL AGES.

Free purse, two hundred dollars. Three-quarter mile heats; best two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Daisy D. b. m., by Wheatly	Bruce Cockrell	Salinas.
Idalene Cotton, ch. f., by Jim Brown.....	Maltese Villa Stables.....	Sacramento.
Sid, by Sidarthur.....	B. F. Denio.....	Vallejo.
Mart Gibson, ch. c., by Joe Hooker	B. C. Holly.....	Vallejo.
Del, blk. g., by Falsetto	P. C. Donalach	Los Angeles.
Not Idle, ch. f., by Wildidle	W. L. Appleby	Santa Clara.

SUMMARY.

Daisy D.....	1	1
Not Idle.....	2	2

Time—1:10½.

SPECIAL RACE.

Free purse, five hundred dollars; divided, two hundred and fifty dollars, one hundred and fifty dollars, and one hundred dollars.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Woodnut, ch. s., by Nutwood	B. C. Holly.....	Vallejo.
Yolo Maid, b. m., by Alex Button.....	J. A. Goldsmith	San Francisco.
Maggie E, br. m., by Nutwood	J. W. Donathan.....	San Francisco.

SUMMARY.

Yolo Maid	1	1	1
Woodnut	2	2	2
Maggie E.....	3	3	3

Time—2:22; 2:18; 2:18½.

CART RACE.

Purse, one hundred and fifty dollars. Divided, seventy-five dollars, fifty dollars, and twenty-five dollars.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Old Sport	James Howard	San José.
X E B	X. E. Burns	San José.
Charlie G	Charles Grover	San José.
Billy Dixie	H. C. Ahlers	San José.

SUMMARY.

Old Sport	3	2	1	2	1	1
X E B	2	1	3	1	2	2
Charlie G	4	3	2	3	dr.	
Billy Dixie	1	dis.				

Time—2:43; 2:43; 2:39; 2:36 $\frac{1}{2}$; 2:41; 2:39.

RACE No. 18—TROTTING.

Free for all. Purse, one thousand dollars. Mile heats; best three in five; to harness.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Lot Slocum, b. g., by Electioneer	Alfred Gonzales	San Francisco.
Arab, b. g., by Arthurton	O. A. Hickok	San Francisco.
Stamboul, b. s., by Sultan	L. J. Rose	Los Angeles.
Adair, b. g., by Electioneer	J. A. Dustin	Oakland.

SUMMARY.

Arab	1	1	2	1
Stamboul	2	2	1	2

Time—2:15; 2:16; 2:16; 2:16 $\frac{3}{4}$.

TRANSACTIONS

OF THE

SIXTH DISTRICT AGRICULTURAL ASSOCIATION

For the Year 1888,

Composed of the Counties of Los Angeles, Ventura, and San Bernardino.

OFFICERS OF THE ASSOCIATION.

J. W. ROBINSON.....	President.
E. A. DE CAMP.....	Secretary.
E. F. SPENCE.....	Treasurer.

DIRECTORS.

J. W. WATERS, JR.....	San Bernardino.
DR. K. D. WISE.....	Los Angeles.
AL. WORKMAN.....	Los Angeles.
L. J. ROSE, JR.....	San Buenaventura.
J. W. ROBINSON.....	Los Angeles.
L. J. ROSE.....	Los Angeles.
LOUIS LICHTENBERGER.....	Los Angeles.
J. C. NEWTON.....	Los Angeles.

REPORT.

LOS ANGELES, November —, 1888.

To the honorable the State Board of Agriculture:

GENTLEMEN: The Directors of the District Agricultural Association No. 6 submit this, their report of the transactions of said association, for the year ending this date.

This association tried the experiment for the first time of holding its pavilion exhibit at their fair grounds. It was a success, giving complete satisfaction to our patrons and to the management.

Very respectfully,

E. A. DeCAMP, Secretary.

RECEIPTS AND EXPENDITURES.

Receipts for the Fiscal Year ending November 30, 1888.

Cash, as per last report	\$251 20	
State appropriation for 1887	2,500 00	
Forfeits, rentals, etc., and bonus	1,606 10	
Old entrances	580 00	
Penalties for Trotting Associations	67 00	
Donations and return premiums	1,222 60	
Insurance—policy on burned stable	250 00	
Collection account—other Coast Fair Associations	120 00	
Entrances and stakes, Speed Department	6,210 00	
Pools and other privileges	4,958 29	
Gate receipts	6,067 75	
Discounts, Directors' notes	5,250 00	
		<u>\$29,082 94</u>

Expenditures for the Fiscal Year ending November 30, 1888.

Permanent improvements at park	\$3,295 17	
Paid interest and principal, borrowed money	5,180 60	
Sundry old accounts	149 22	
Legal account, reorganization expenses	495 00	
Repairs	629 98	
Decorations, rent of chairs, showcases, etc.	287 25	
Insurance and taxes	649 45	
Freight on exhibits	47 25	
Collections forwarded to other associations	120 00	
American Trotting Association, dues and penalties	133 50	
Premiums	2,829 50	
Purses and stakes, Speed Department	12,380 00	
Payroll	782 05	
Advertising, bill posting, etc.	600 05	
Hay and bedding	291 00	
Band and band wagon	353 85	
Secretary, contingent account and salary to October, 1888	575 05	
		<u>\$28,799 40</u>
Balance on hand as per C. B.		283 54
		<u>\$29,082 94</u>

OPENING ADDRESS.

By HON. L. J. ROSE.

LADIES AND GENTLEMEN OF THE SIXTH DISTRICT AGRICULTURAL ASSOCIATION: We meet again to hold our annual fair. Looking through a vista of twenty-five years many pleasant recollections are brought back to my memory. About twenty-five years ago the little acorn was planted which each year has grown with increased vigor, and now the tree has assumed fair proportions, and each year makes it more imposing and more yielding of enjoyment. Then, on every side the lands for miles around were an uncultivated and unclaimed treeless waste, which no one cared to own even at \$2 an acre. How changed all this is now. Lands are now subdivided into lots and selling at the rate of \$5,000 or more an acre. Beautiful avenues are laid out leading to this park, lined on either side with shade trees, and backed behind lawns and flower gardens are beautiful villas of every style that architectural ingenuity can devise. As you drive along these well kept and sprinkled avenues, the air is laden with the perfume of the orange, heliotrope, jasmine, and the rose, whilst through the open casement floats the merry voice and song of a refined population.

A city is almost knocking at our gates demanding more room to spread, whilst on the other side can almost be heard the boom of the waves as they break on the shore, and the air is fresh and cool with the salt-laden breeze as it comes, health-giving, rustling through the trees. Nor is the change which has taken place in the features of the landscape more marked than the change in the varied productions of the farm, the orchard, the vineyard, and the improvements which have taken place in the various breeds of all domestic animals, and especially horses. Then our speed programme was very limited. There was no thoroughbred in all the boundaries of this southern district, whereas, we are now breeding them by the hundreds, and of such quality that they are the peers of the best in the world. Then a trotting race or a pacing race meant that a race made in three minutes was good time, whereas, we now have, in the stabling at our track, horses which hold the record of the world. Not all have been reared in this country, but all are California bred, and we have good enough ones belonging and reared in this district to feel that, in accordance with the number produced, we have a fair share of the best; and when we remember Arrow, who is now flying in the highest marks, with a chip on his shoulder challenging all comers, and as we know by the telegraph having no defeats to date to explain away, we may be excused if we believe that the highest possibilities are not beyond our reasonable expectations. We are as yet small beginners, but we are laying good foundations. The telegraph has flashed the news that the highest priced stallion ever sold is one out of a mother who was raised in this county. Fifty thousand dollars was paid at auction for this stallion by a gentleman from San Diego, and this might indicate that he was coming back to this State.

We take much justifiable pride in our orange culture, our grapes, and fruits of every kind, and taking all in all, we may be thought reasonable

in our opinion when we believe that we have advantages certainly equal to those of any part of this continent.

It is true, we are meeting with some disadvantages; we have to exercise ingenuity with wisdom to overcome some serious drawbacks; and as I have a great love for fruit farming and have given it much thought, it may not be out of place to give some theories which have grown out of observation, for it is by the small accumulation of observation of various individuals that remedies may be found.

Two of the most serious drawbacks, which have developed themselves in this county, are the cottony scale, endangering in many localities the growing of the orange and lemon with profit, and some unnamed disease, which is causing the dying of vineyards in some localities in this county. This cottony scale insect is a most astonishingly prolific multiplier, and much experimental work has been done by intelligent horticulturists and scientists, as yet with no practical success.

I, myself, have expended several thousand dollars spraying and fumigating trees, and as yet with more injury to the trees than benefit, until I despair of any success in either of these modes. But I have learned, however, a habit of this scale bug which is never varied from. The scale always goes up, and never down. This is valuable knowledge, for we have only to guard one direction. It may fall off the tree, and they do in thousands, and many will hide and live for a time in the ground. But in the end they find the trunk of the tree and go up again. My cure would be to trim the tree, stripping it of all foliage and small branches, leaving only some of the larger branches, and well cut back at that. Then to thoroughly wash the trunk and branches that are left to form another top with sal soda dissolved in warm water. Care must be taken that no egg or bug escapes, for in this thorough washing success lies. Immediately after washing, and before any bug can crawl up, an inverted cone must be tied around the trunk of the tree, so that as they crawl out of the ground up the trunk they crawl under this cone-shaped bandage, and when they come to the end they will stop, for their instinct of never going back answers here a good purpose. As they accumulate they will have to be killed, and if this is carefully attended to there will be no more in a short time, for they can only live by sucking the sap of the tree. It is easily seen that this is a radical cure, if thoroughly done, and if the orchard is not too large it can be done with a comparatively small outlay. To make these cones various expedients will suggest themselves. Dr. Conger, of Pasadena, says that he can make them by taking old worn-out barley sacks (burlap) and wrapping around the tree, tying with a fencing rope around the lower portion, then stripping the upper part over this tie, and pulling it out so that the lower edge will not touch the tree, say by at least half an inch or more. This will be a convenient material to press against, thus killing the bug, when the edge can be again adjusted by shaping it out away from the trunk. A cone can also be made by taking tarred paper, and cutting it in such a way that when tied the lower part will stand away from the tree. In that case cotton or wool would have to be used to fill up the inequalities of the tree, for there are generally valley or flute-like gutters in large orange trunks.

As regards the disease which is killing our grapevines in some localities, it is the more annoying, as no satisfactory reason can be given for it. Dig up a vine which has died, and the bark and wood both in the roots and top of the vine are entirely free from imperfections or mars, no insect, no decay. In fact, no reason for the trouble can be given. Professor Morse, of the University, who was sent for to make examination, found nothing,

and gave it as his belief that death was caused by violent changes of temperature, a very hot time of weather following a cold foggy time, thus causing an exhaustion of the stock of the plant faster than it was prepared for. There would be some plausibility about this, were it not a fact that we have never had such trouble in this section. It might be possible to believe that one such accidental year might come where the changes from cold to hot were exceptional, and thus have this sickness for that one year, but the trouble about this matter is that this condition of the vines dying is repeating itself with each coming year, and it now has repeated itself for say five years, and each succeeding year the damage has increased. It is not, therefore, an accident that has come about for one year, but one that has repeated itself every year for the last five years. Now, this would not likely be the case, nor can it be believed that this one year has planted this disease and time completed the harm done. It is a fact that the vines near Anaheim were afflicted first, followed by, perhaps a year after, those near Santa Ana, and subsequent to that time it has made its appearance in San Gabriel Valley. I have studied over this matter much, and tried to form some theory concerning it. There is one circumstance which may possibly explain this singular phenomenon, namely: too early pruning. In years previous to the appearance of this disease, pruning was never done until the vine had shed all its leaves. At Anaheim I first saw pruning done as soon almost as the grape crop was gathered, and even as early as October. It being convenient, I too followed in the practice, and others again followed me, and with no immediate evil effect. It is true, vines thus early pruned were the last to bud out the following spring, but as there was no enfeebled condition of growth, when the vines did start, it was a condition of affairs to be desired, for it made less risk to the crop of grapes in being overtaken by a late frost. Yet that there was an effect was clearly shown by the lateness of the vine putting forth their new growth. Again Anaheim was the first to practice early pruning, and was the first to suffer by the vines dying. Santa Ana would naturally, being adjoining, be the next to follow the practice, and was next affected. Sunny Slope, my former home, was the first to suffer in the San Gabriel Valley, and was the first to practice this early pruning. All these facts may be only coincidents, and may not contain the cause of this disease, yet when no satisfactory reason has ever been given, it may be well to postpone its early pruning, and go back to the late pruning as was practiced in former years, until all the leaves have naturally been shed by maturity. To prune in October and November nearly all the leaves are yet held fast, and many of the ends of shoots are yet making a feeble growth. It is, of course, a well known fact, that the stripping of the leaves of the most robust growth of any tree or plant, if often enough repeated, will kill such tree or plant. It is true, in October and November, leaves of the vine have naturally performed their duty, and the wood is hard, yet it may be, after all, that this early pruning followed for a few years, in the end tells on the life and health of a vine, and has the same effect, only more slowly, and less apparent than the stripping the new leaves. It would be a pleasure to give in detail the various displays on exhibition, but I have been unwell, and it has only been by a great effort that I have prepared this short paper. If, however, there has been a suggestion made, which may be a benefit to orange or grape culture, then the effort will not have been in vain. I thank you for your attention, and hope the future may be increasing in its prosperity in the same ratio as it has from the beginning till now, and that we may all often yet meet to enjoy this increased prosperity together.

PREMIUMS AWARDED—1888.

LIVE STOCK DEPARTMENT.

Name of Animal.	Exhibitor.	Address.	Award.
HORSES—THOROUGHbred—STALLIONS.			
Bachelor, four years old or over.....	John Gries.....	Compton.....	\$20 00
Ed. McGinnis, three years old or over.....	John Gries & Co.....	Compton.....	\$15 00
Four Aces, two years old.....	John D. Dunn.....	Los Angeles.....	\$12 00
Bellringer, two years old.....	A. B. Wise.....	San Bernardino.....	.....
Dr. Crawford, two years old.....	John M. Fuqua.....	Chino.....	\$6 00
Washington Bartlett, one year old.....	John Gries.....	Compton.....	\$10 00
Hockhocking, suckling colt.....	John D. Dunn.....	Los Angeles.....	\$8 00
MARES.			
Manzanita, four years old or over, with colt.....	John D. Dunn.....	Los Angeles.....	\$15 00
Welcome, three years old or over.....	John Gries & Co.....	Compton.....	\$10 00
Senovia, two years old.....	F. M. Slaughter.....	Chino.....	\$8 00
—, one year old.....	John Gries.....	Compton.....	\$6 00
Henrietta, one year old.....	John Gries.....	Compton.....	.....
—, suckling colt.....	John Gries.....	Compton.....	\$5 00
FAMILIES.			
Bachelor and five colts.....	John Gries.....	Compton.....	\$25 00
Mattie Adams and two colts.....	P. J. Abbott.....	Silverado.....	\$20 00
Nora and two colts.....	F. Duryea.....	St. James.....	\$10 00
GRADED HORSES.			
Ruth P, four years old or over.....	E. C. Parrish.....	Santa Monica.....	\$10 00
STANDARD-BRED AND ROADSTERS—STALLIONS.			
Modoc Chief, four years old or over.....	H. T. Harris.....	San Bernardino.....	.....
Woolsey, four years old or over.....	Richard Gird.....	Chino.....	.....
Del Sur, four years old or over.....	Charles A. Durfee.....	Los Angeles.....	\$20 00
Buccaneer, Jr., four years old or over.....	W. J. Kessler.....	Pomona.....	.....
Forrest Clay, four years old or over.....	George T. Beckers.....	Phoenix, A. T.....	.....
Prestige, four years old or over.....	R. J. Blee.....	Santa Ana.....	\$10 00
Patsy M, three years old.....	P. Morgan.....	Santa Monica.....	\$15 00
Rory O'More, two years old.....	George Hinds.....	Wilmington.....	\$10 00
Teleferro, two years old.....	A. M. Kruger.....	Green Meadows.....	.....
Harry Gage, two years old.....	N. A. Covarrubias.....	Los Angeles.....	\$12 00
Tomboy, two years old.....	W. W. Alward.....	Florence.....	\$6 00
Regalo, one year old.....	B. F. Wood.....	Los Angeles.....	\$10 00
—, one year old.....	E. A. DeCamp.....	Los Angeles.....	\$5 00
Presto, one year old.....	R. J. Blee.....	Santa Ana.....	.....
—, suckling colt.....	C. A. Durfee.....	Los Angeles.....	\$6 00
—, suckling colt.....	J. Martin.....	Los Angeles.....	\$3 00
MARES.			
Dart, four years old or over.....	C. A. Durfee.....	Los Angeles.....	\$15 00
Bronco, four years old or over.....	E. A. DeCamp.....	Los Angeles.....	\$8 00
Tuma, three years old.....	N. A. Covarrubias.....	Los Angeles.....	\$10 00
Lena D, two years old.....	C. A. Daniels.....	Green Meadows.....	\$15 00
Monrovia, two years old.....	George Hinds.....	Wilmington.....	\$5 00
Pogonip, two years old.....	George Hinds.....	Wilmington.....	\$5 00
Marian, two years old.....	George Hinds.....	Wilmington.....	\$5 00
Belle, two years old.....	George Hinds.....	Wilmington.....	\$5 00
Luck, two years old.....	George Hinds.....	Wilmington.....	\$5 00
Florence Del, one year old.....	C. A. Durfee.....	Los Angeles.....	\$6 00
Lalla King, suckling colt.....	C. A. Durfee.....	Los Angeles.....	.....
Susie King, suckling colt.....	C. A. Durfee.....	Los Angeles.....	\$3 00
Amber, suckling colt.....	E. A. DeCamp.....	Los Angeles.....	\$5 00

LIVE STOCK DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
STANDARD FAMILIES.			
Del Sur and five colts.....	C. A. Durfee.....	Los Angeles.....	\$25 00
Bronco and two foals.....	E. A. DeCamp.....	Los Angeles.....	\$20 00
GENERAL PURPOSES—STALLIONS.			
Dell, four years old or over.....	James Orr.....	Compton.....	\$10 00
Fred Drake, four years old or over.....	J. P. Sanborn.....	Whittier.....	\$8 00
Tom, three years old.....	M. Michaels.....	Wilmington.....	\$8 00
Dude, two years old.....	Daniel Lane.....	Downey.....	\$5 00
Joe, one year old.....	N. Wilkinson.....	Downey.....	\$5 00
Nat, one year old.....	Wm. Sex.....	Downey.....	\$4 00
Negro Baby, one year old.....	T. J. Sparks.....	Artesia.....	\$5 00
Franklin, suckling colt.....	Jas. Stewart.....	Downey.....	\$5 00
MARES.			
Maggie, four years old or over.....	James Orr.....	Compton.....	\$10 00
Ranchito Belle, four years old or over.....	C. A. Coffman.....	Ranchito.....	\$5 00
Annie, four years old or over.....	C. A. Coffman.....	Ranchito.....	\$10 00
Mary, three years old.....	M. Michaels.....	Wilmington.....	\$8 00
Fanny, two years old.....	M. Michaels.....	Wilmington.....	\$6 00
Fanny, one year old.....	Jas. Stewart.....	Downey.....	\$8 00
Nettie, one year old.....	Wm. Sex.....	Downey.....	\$6 00
Peggie, one year old.....	C. A. Coffman.....	Ranchito.....	\$5 00
Ben Aldrich, gelding, aged.....	J. P. Sanborn.....	Whittier.....	\$8 00
Chief, gelding, two years old.....	James Stewart.....	Downey.....	\$10 00
DRIVING HORSES.			
Tonto, three years old.....	N. A. Covarrubias.....	Los Angeles.....	\$10 00
Black Tom, five years old.....	H. C. Wyatt.....	Los Angeles.....	\$15 00
ROADSTER TEAMS.			
Red Cloud and John Gries.....	N. A. Covarrubias.....	Los Angeles.....	\$20 00
CARRIAGE TEAM.			
Oliver Twist and David Copperfield.....	I. B. Newton.....	Los Angeles.....	\$10 00
—, —, —, —.....	L. J. Rose, Jr.....	San Buenav'n'tra.....	\$15 00
—, —, —, —.....	W.J. McGaugh.....	Los Angeles.....	\$10 00
SADDLE ANIMALS.			
Fannie.....	W. J. Cole.....	Anaheim.....	\$5 00
Jim.....	A. Machado.....	The Palms.....	\$10 00
Little Dude.....	A. Lugo.....	San Antonio.....	\$5 00
DRAFT STALLIONS.			
Dandy Dick (Clydesdale), four years old or over.....	Clydesdale Ass'cn.....	Downey.....	\$20 00
Badin (Norman), four years old or over.....	A. B. Wise.....	San Bernardino.....	\$10 00
Illinois (Norman), four years old or over.....	R. Gird.....	Chino.....	\$20 00
Pompey (Norman), three years old.....	B. Walton.....	Compton.....	\$18 00
Dave (Norman), one year old.....	W. Newton.....	Downey.....	\$8 00
Prince (Norman), suckling.....	W. Newton.....	Downey.....	\$5 00
Frank, suckling.....	C. Johnston.....	Garvanza.....	\$5 00
MARES.			
Fannie and colt, four years old or over.....	J. G. De Turk.....	Los Angeles.....	\$10 00
Lady Clyde and colt (Norman), four years old or over.....	W. H. Morton.....	Compton.....	\$15 00
— (Norman), three years old.....	R. Gird.....	Chino.....	\$15 00
— (Norman), two years old.....	R. Gird.....	Chino.....	10 00
Brownie (Norman), two years old.....	B. Walton.....	Compton.....	\$16 00
Dixie, one year old.....	W. Newton.....	Downey.....	\$8 00
Nellie, one year old.....	W. Newton.....	Downey.....	\$5 00
Flora Temple (Belgian), one year old.....	W. H. Morton.....	Compton.....	\$10 00
Edna, one year old.....	E. A. De Camp.....	Los Angeles.....	\$5 00
FAMILIES.			
Illinois and five colts (Norman).....	R. Gird.....	Chino.....	\$25 00
Dandy Dick and colts (Norman).....	Clydesdale Ass'cn.....	Downey.....	\$25 00
Betts, mare and two colts.....	B. Walton.....	Compton.....	\$10 00

LIVE STOCK DEPARTMENT--Continued.

Name of Animal.	Exhibitor.	Address.	Award.
—, mare and two colts	R. Gird.....	Chino.....	\$20 00
Jennie, mare and two colts.....	Wm. Sex.....	Downey.....	\$10 00
DRAFT TEAM.			
—, ...	Kerckhoff, Cuzner & Co.	Pomona	\$15 00
SHETLAND PONIES—STALLIONS.			
Pair, four years old or over.....	J. W. Gardner.....	Los Angeles.....	\$15 00
Pinto, aged.....	J. W. Gardner.....	Los Angeles.....	\$10 00
Suckling colt	J. W. Gardner.....	Los Angeles.....	\$4 00
MARES.			
Pair, four years old or over.....	J. W. Gardner.....	Los Angeles.....	\$15 00
Sweetheart, aged	J. W. Gardner.....	Los Angeles.....	\$10 00
Mare and colt	J. W. Gardner.....	Los Angeles.....	\$10 00
Suckling filly.....	J. W. Gardner.....	Los Angeles.....	\$4 00
JACKS AND MULES.			
Young Peter, jack.....	H. C. Campbell.....	Norwalk	\$10 00
Sally, jenny	A. B. Farnsworth.....	Trabuco	\$10 00
Dave and Jim, mules.....	H. C. Campbell.....	Norwalk	\$10 00
Fanny and Lucy, mules.....	R. Gird.....	Chino	\$10 00
DURHAMS—BULLS.			
Ranchito Duke, three years old or over.....	C. A. Coffman.....	Ranchito.....	\$8 00
Ranchito Duke 4th, three years old or over.....	C. A. Coffman.....	Ranchito.....	\$6 00
Prince, two years old.....	C. B. Woodhead.....	Los Angeles.....	\$5 00
Airdres Cherry 2d Prince, one year old.....	C. B. Woodhead.....	Los Angeles.....	\$5 00
COWS.			
Airdres Cherry 2d, three years old or over.....	C. B. Woodhead	Los Angeles.....	\$25 00
Jennie, aged	N. A. Covarrubias.....	Los Angeles.....	\$10 00
Bernardino Daisy, aged	C. A. Coffman.....	Ranchito.....	\$10 00
Reddy, aged	C. A. Coffman.....	Ranchito.....	\$10 00
Biddy, three years old or over.....	C. A. Coffman.....	Ranchito.....	\$10 00
HERDS.			
Male and four females.....	C. B. Woodhead.....	Los Angeles.....	\$20 00
HEREFORDS—COWS.			
Filbert 2d, three years old or over.....	J. W. Bixby & Co.....	Long Beach.....	\$15 00
Filbert 3d, two years old.....	J. W. Bixby & Co.....	Long Beach	\$10 00
Jennie, heifer calf	J. W. Bixby & Co.....	Long Beach.....	\$5 00
HOLSTEINS—BULLS.			
Lena Wit, aged	J. W. Bixby & Co.....	Long Beach	\$10 00
Reverie 2d, calf	J. W. Bixby & Co.....	Long Beach.....	\$10 00
Cleveland, calf.....	J. W. Bixby & Co.....	Long Beach.....	\$5 00
Blaine, calf.....	J. W. Bixby & Co.....	Long Beach.....	\$5 00
Santa Fé Springs, calf	C. B. Woodhead.....	Los Angeles.....	\$12 00
COWS.			
Lena, aged	F. Bacon	East Los Angeles.....	\$10 00
Aggie Brown, aged	J. W. Bixby & Co.....	Long Beach.....	\$8 00
Los Angeles Princess, aged	J. W. Bixby & Co.....	Long Beach.....	\$10 00
Gypsy, aged	J. W. Bixby & Co.....	Long Beach.....	\$8 00
Nellie, heifer calf	J. W. Bixby & Co.....	Long Beach.....	\$5 00
JERSEYS—BULLS.			
Cleveland, aged	J. D. Durfee.....	El Monte.....	\$15 00
Ashantee Sultan, aged	C. B. Woodhead.....	Los Angeles.....	\$20 00
Jo Romero, aged	C. B. Woodhead.....	Los Angeles.....	\$10 00
Starter, aged	C. B. Woodhead.....	Los Angeles.....	\$8 00
Buck, aged	F. N. Orin.....	Downey.....	\$12 00
Orphan Boy, two years old	A. M. Krüger	Green Meadows.....	\$3 00
Rhine, calf	J. D. Durfee.....	El Monte.....	\$3 00
Erskine, calf	J. D. Durfee.....	El Monte.....	\$6 00
Ashantee Youcaipe, calf.....	C. B. Woodhead.....	Los Angeles.....	\$5 00

LIVE STOCK DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
COWS.			
Bonita, aged	J. D. Durfee	El Monte	\$10 00
Dolly, aged	J. D. Durfee	El Monte	
Youcaipe, aged	C. B. Woodhead	Los Angeles	\$25 00
Mariposa, aged	C. B. Woodhead	Los Angeles	\$10 00
Sun Maid, two years old	J. D. Durfee	El Monte	\$12 00
Christabel, two years old	J. D. Durfee	El Monte	\$6 00
Black-eyed Susan, one year old	J. D. Durfee	El Monte	\$8 00
Carmalita, one year old	J. D. Durfee	El Monte	\$4 00
Highland Mary, heifer calf	J. D. Durfee	El Monte	\$3 00
Fanny, heifer calf	J. D. Durfee	El Monte	\$6 00
HERD—BULL.			
Cleveland, aged, and two cows	J. D. Durfee	El Monte	\$20 00
SWEEPSTAKES—BULLS.			
Cleveland, aged (Jersey)	J. D. Durfee	El Monte	\$20 00
Ashantee Sultan, aged (Jersey)	C. B. Woodhead	Los Angeles	\$10 00
COWS.			
Bonita, aged (Jersey)	J. D. Durfee	El Monte	
Dolly, aged (Jersey)	J. D. Durfee	Los Angeles	
Youcaipe, aged (Jersey)	C. B. Woodhead	Los Angeles	\$10 00
Airdres Cherry, aged (Durham)	C. B. Woodhead	Los Angeles	\$20 00
SHEEP.			
Spanish Merino buck, aged	P. Davilo	Elizabeth Lake	\$15 00
Spanish Merino buck, one year old	P. Davilo	Elizabeth Lake	\$10 00
Spanish Merino ewes, pair, one year old	P. Davilo	Elizabeth Lake	\$25 00
Spanish Merino lambs, pen	P. Davilo	Elizabeth Lake	\$20 00
Spanish Merino fleece, sixty-three pounds	P. Davilo	Elizabeth Lake	D'p & \$10
HOGS—BERKSHIRES.			
Tom, aged, boar	C. A. Coffman	Ranchito	\$10 00
Bell Flory, aged, sow	C. A. Coffman	Ranchito	\$10 00
Bell Flory, aged, sow, and six pigs	C. A. Coffman	Ranchito	\$15 00
Ranchito Lass, sow, six months old	C. A. Coffman	Ranchito	\$8 00
Sally and Jo, pair less than six months old	C. A. Coffman	Ranchito	\$10 00
Pen of pigs	C. A. Coffman	Ranchito	\$15 00
POULTRY.			
Pair of Leghorns, brown	Willie Julian	Downey	\$2 00
Pair of Silver-Spangled Hamburg	John Zinn	Downey	\$2 00
Pair of Silver-Spangled Grade	John Zinn	Downey	\$2 00
Pair of Game Bantams	J. E. Preston	Los Angeles	\$2 00
Pair of brood Bantams	J. E. Preston	Los Angeles	\$2 00
Pair of Plymouth Rocks	J. Brown	Los Angeles	\$2 00
Pair of Buff Cochins	J. Brown	Los Angeles	\$2 00
Pair of Game fowls	J. Brown	Los Angeles	\$2 00

LADIES' EQUESTRIANSHIP.

NAME.	Address.	Award.
Miss Irene Savage	Los Nietos	\$75 00
Miss Sarah E. Baker	Norwalk	\$25 00
Mrs. Fannie McElfresh	Santa Monica	\$15 00
Miss Angelina Santa Cruz	Los Angeles	\$10 00
Mrs. J. L. Fetterman	Long Beach	\$15 00
Mrs. M. Grossmayer	San Bernardino	\$10 00

BABY DEPARTMENT.

NAME.	Age— Months.	Address.	Premium.
Simon Fitzpatrick	11	Santa Ana .....	.....
Emma J. Smith	8	Los Angeles .....	.....
Clara Dunlap	9	Los Angeles	 \$20 00
Edward F. Lechner	11	Los Angeles .....	.....
Stewart A. Baker	7	Los Angeles .....	.....
Florence Van Dan	13	Los Angeles .....	.....
Henry Augustus Arend	16	Los Angeles .....	.....
Elmer M. Ries	16	Los Angeles .....	.....
Francis Harrow	4	Los Angeles .....	.....
Pearlie May Younger	4	Los Angeles .....	.....
George Alfred Blackburn	11	Los Angeles .....	.....
Mary Virginia Stewart	3	Los Angeles .....	.....
James A. McCusker	13	Los Angeles .....	.....
Edgar Stanley Brown	9	Santa Ana .....	.....
Chester French	9	Colton	 \$15 00
Frank Jones	1	Los Angeles	 \$10 00
Gerald S. Goddard	9	Los Angeles .....	.....
Morris Tweedy	12	Downey	 \$10 00
Estella Merchant	4	Norwalk	 \$5 00
Annie L. Camp	13	Downey	 \$5 00
Fannie Taylor	5	Ranchito	 \$3 00
TWINS.			
Aubrey and Roy McCulloch	13	Santa Ana .....	.....
Thomas R. and John M. Depew	13	Los Angeles	 \$20 00

MACHINERY DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
Cider mill and press	W. N. Hawley & Co.	Los Angeles	Diploma.
Horse hay rake	W. N. Hawley & Co.	Los Angeles	Diploma.
Hay and straw cutter	W. N. Hawley & Co.	Los Angeles	Diploma.
Hand corn sheller	W. N. Hawley & Co.	Los Angeles	Diploma.
Broadcast grain sowing machine	W. N. Hawley & Co.	Los Angeles	Diploma.
Mowing machine	W. N. Hawley & Co.	Los Angeles	Diploma.
Potato digger	W. N. Hawley & Co.	Los Angeles	Diploma.
Glidden harrow	W. N. Hawley & Co.	Los Angeles	Diploma.
Keystone disc harrow	W. N. Hawley & Co.	Los Angeles	Diploma.
Horse cultivator	W. N. Hawley & Co.	Los Angeles	Diploma.
Double shovel plow	W. N. Hawley & Co.	Los Angeles	Diploma.
Woodmansee windmill	A. S. Beymer	El Monte	Diploma.
Platform scale	W. N. Hawley & Co.	Los Angeles	Diploma.
Farm and road scraper	W. N. Hawley & Co.	Los Angeles	Diploma.
Gang plow	W. N. Hawley & Co.	Los Angeles	Diploma.
Sulky plow	W. N. Hawley & Co.	Los Angeles	Diploma.
Steel plow	W. N. Hawley & Co.	Los Angeles	Diploma.
Sidehill plow	W. N. Hawley & Co.	Los Angeles	Diploma.
One-horse plow	W. N. Hawley & Co.	Los Angeles	Diploma.
Chilled plow	W. N. Hawley & Co.	Los Angeles	Diploma.
Display of agricultural implements	Montgomery & Grant	Los Angeles	Dip. & \$10
Hay press	B. F. Lavin	Stockton	Dip. & \$10
Windmill (Monitor)	S. W. Lintweder	Los Angeles	 \$10 00
Top buggy	W. N. Hawley & Co.	Los Angeles	Diploma.
Open buggy	W. N. Hawley & Co.	Los Angeles	Diploma.
Farm wagon	W. N. Hawley & Co.	Los Angeles	Diploma.
Road cart	W. N. Hawley & Co.	Los Angeles	Diploma.
Ladies' phaeton	W. N. Hawley & Co.	Los Angeles	Diploma.
Street goods wagon	W. N. Hawley & Co.	Los Angeles	Diploma.
Street goods wagon	W. N. Hawley & Co.	Los Angeles	Diploma.
Combined road cart	Myron F. Tarble	Los Angeles	Diploma.
Road and track sulky	Myron F. Tarble	Los Angeles	Dip. & \$10

LADIES' DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
Silk cushion.....	Mrs. R. P. Ingram.	Los Angeles.....	\$2 00
Kensington work on silk.....	Mrs. R. P. Ingram.	Los Angeles.....	.....
Dress, crewel work.....	Mrs. R. P. Ingram.	Los Angeles.....	\$2 00
Towel, crewel work.....	Mrs. R. P. Ingram.	Los Angeles.....	.....
Cushion, in chenille.....	Mrs. R. P. Ingram.	Los Angeles.....	.....
Cushion, in chenille.....	Mrs. R. P. Ingram.	Los Angeles.....	.....
Pair of suspenders (chenille).....	Mrs. R. P. Ingram.	Los Angeles.....	\$1 00
Sachet (chenille).....	Mrs. R. P. Ingram.	Los Angeles.....	.....
Sachet (chenille).....	Mrs. R. P. Ingram.	Los Angeles.....	.....
Sofa cushion.....	Mrs. R. P. Ingram.	Los Angeles.....	.....
Plaque—art ribbon work.....	Mrs. R. P. Ingram.	Los Angeles.....	\$2 00
Six etched napkins.....	Mrs. R. P. Ingram.	Los Angeles.....	\$1 00
Tapestry.....	Mrs. R. P. Ingram.	Los Angeles.....	\$1 00
Scarf.....	Mrs. R. P. Ingram.	Los Angeles.....	\$2 00
Infant's skirt.....	Mrs. R. P. Ingram.	Los Angeles.....	\$1 00
Banner.....	Mrs. R. P. Ingram.	Los Angeles.....	\$1 00
Sofa cushion.....	Mrs. R. P. Ingram.	Los Angeles.....	\$1 00
Table scarf.....	Mrs. R. P. Ingram.	Los Angeles.....	\$1 00
Quilt.....	Mrs. R. P. Ingram.	Los Angeles.....	.....
Carriage afghan.....	Mrs. R. P. Ingram.	Los Angeles.....	\$2 00
Head rest.....	Mrs. R. P. Ingram.	Los Angeles.....	.....
Fancy knitting.....	Mrs. R. P. Ingram.	Los Angeles.....	\$2 00
Fancy cushion.....	Mrs. R. P. Ingram.	Los Angeles.....	\$1 00
Infant's dress.....	Mrs. R. P. Ingram.	Los Angeles.....	\$1 00
Infant's outfit.....	Mrs. R. P. Ingram.	Los Angeles.....	\$5 00
Macrame work.....	Mrs. R. P. Ingram.	Los Angeles.....	\$1 00
Four pieces stamping, three shams, one tray cloth.....	Mrs. R. P. Ingram.	Los Angeles.....	\$2 00
Kensington work in silk.....	Miss S. C. Stockton.	Los Angeles.....	.....
Six doylies.....	Miss S. C. Stockton.	Los Angeles.....	\$1 00
Table scarf.....	Miss S. C. Stockton.	Los Angeles.....	\$1 00
Table scarf.....	Miss S. C. Stockton.	Los Angeles.....	\$1 00
Table scarf.....	Miss S. C. Stockton.	Los Angeles.....	.....
Two pieces—Banner and whisk broom- holder.....	Miss M. Stockton.	Los Angeles.....	\$2 00
Panel.....	Miss M. Stockton.	Los Angeles.....	\$1 00
Two pieces embroidery on linen.....	Mrs. J. Cumpston.	Vernon.....	\$1 00
Specimen of braid work.....	Mrs. J. Cumpston.	Vernon.....	\$1 00
Handkerchief.....	Mrs. J. Dunsmoor.	Los Angeles.....	.....
Handkerchief.....	Mrs. J. Dunsmoor.	Los Angeles.....	.....
Hand-sewing.....	Mrs. J. Dunsmoor.	Los Angeles.....	\$2 00
Quilt.....	Mrs. J. Dunsmoor.	Los Angeles.....	\$2 00
Tablecloth.....	Mrs. S. M. King.	University.....	Ex. only.
Handkerchief.....	Mrs. S. M. King.	University.....	Ex. only.
Quilt.....	Mrs. F. J. Andrus.	Los Angeles.....	\$2 00
Lambrequin.....	Mrs. F. J. Andrus.	Los Angeles.....	\$1 00
Crochet work in linen.....	Mrs. F. J. Andrus.	Los Angeles.....	\$1 50
Four tidies.....	Mrs. F. J. Andrus.	Los Angeles.....	.....
Seven pieces of crochet work.....	Mrs. F. J. Andrus.	Los Angeles.....	\$2 00
Five pieces of kensington work.....	Mrs. F. J. Andrus.	Los Angeles.....	\$1 00
Quilt.....	Mrs. M. Shreke.	Los Angeles.....	\$2 00
Three tidies.....	Miss Lura Cottle.	Coldwater.....	\$1 00
Crochet lace.....	Miss Lura Cottle.	Coldwater.....	\$2 00
Sixty specimens of pressed flowers and ferns.....	Mrs. M. B. De Camp.	La Dow.....	\$5 00
California autumn leaves.....	Mrs. M. B. De Camp.	La Dow.....	\$5 00
Catalogued cabinet of minerals.....	Arthur Kinney.	Los Angeles.....	\$10 00
Cabinet of photographic views.....	Arthur Kinney.	Los Angeles.....	\$5 00
Table cover.....	Mrs. G. Skidmore.	Downey.....	\$3 00
Fancy lounge pillow.....	Mrs. G. Skidmore.	Downey.....	\$5 00
Largest display of crochet work.....	Miss C. Stevenson.	Downey.....	\$5 00
Embroidery.....	Miss C. Stevenson.	Downey.....	\$3 00
Artificial hair work.....	Mrs. J. D. Phillips.	Santa Ana.....	\$5 00
Wax work.....	Mrs. J. P. Cover.	Los Angeles.....	\$5 00
Embossed sofa cushion.....	Mrs. L. M. Grider.	Downey.....	\$5 00
Old table cover (1707).....	Mrs. A. L. Ball.	Downey.....	\$5 00
Crochet work in cotton.....	Mrs. M. G. Randolph.	Downey.....	\$3 00
Oil painting.....	Miss Rose R. Darby.	Downey.....	\$5 00

MECHANICAL DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
Hand-made turf goods and harness.....	Myron F. Tarble ..	Los Angeles.....	...\$10 00
Case hand-made horseshoes.....	James P. Browne ..	Santa Ana.....	Dip. and sp. men.
Display of pianos.....	J. W. Gardner.....	Los Angeles.....	Diploma.
Display of organs.....	J. W. Gardner.....	Los Angeles.....	Diploma.
Box of California fossils.....	Arthur W. Kinney.....	Los Angeles.....	Diploma.
Case of minerals.....	Arthur W. Kinney.....	Los Angeles.....	Diploma.
Case of minerals.....	Board of Trade.....	San Bernardino.....	Diploma.
Crystallized minerals.....	Arthur W. Kinney.....	Los Angeles.....	Diploma.
Collection of ornithology.....	Westover & Camp- bell.....	Los Angeles.....	Dip., \$15
Collection of fossils.....	Westover & Camp- bell.....	Los Angeles.....	...\$10 00

AGRICULTURAL DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
Sack of wheat.....	L. A. Farming and Milling Co.....	Los Angeles.....	...\$5 00
Twenty pounds of wheat.....	Board of Trade.....	San Bernardino.....	.....
Twenty pounds of brewing barley.....	Board of Trade.....	San Bernardino.....	...\$5 00
Chevalier barley.....	Board of Trade.....	San Bernardino.....	.....
Sheaf of wheat.....	L. A. Farming and Milling Co.....	Los Angeles.....	...\$5 00
Sack of Chevalier barley.....	L. A. Farming and Milling Co.....	Los Angeles.....	...\$5 00
Barley.....	C. A. Coffman.....	Ranchito.....	.....
Thirty pounds of yellow corn, shelled.....	C. A. Coffman.....	Ranchito.....	...\$5 00
Yellow corn on ear.....	C. A. Coffman.....	Ranchito.....	...\$3 00
Thirty pounds of white corn, shelled.....	C. A. Coffman.....	Ranchito.....	...\$5 00
White corn on ear.....	C. A. Coffman.....	Ranchito.....	...\$3 00
Sack of red potatoes.....	C. A. Coffman.....	Ranchito.....	...\$3 00
Sack of white potatoes.....	C. A. Coffman.....	Ranchito.....	...\$3 00
Largest display of potatoes.....	C. A. Coffman.....	Ranchito.....	...\$5 00
Largest display of pumpkins.....	W. A. Workman.....	Los Angeles.....	...\$5 00
Sack of white potatoes.....	Luca Velardez.....	La Dow.....	...\$5 00
Display of Drumhead cabbage.....	Luca Velardez.....	La Dow.....	...\$2 00
Squashes.....	Miss Lura Cottle.....	Coldwater.....	...\$2 00
Large white onions (two premiums).....	James Moss.....	Westminster.....	...\$8 00
Dutch cabbage.....	Wm. Newton.....	New River.....	...\$2 00
Pole beans.....	Wm. Newton.....	New River.....	...\$3 00
Largest yellow corn.....	Wm. Newton.....	New River.....	...\$3 00
Small yellow corn.....	Wm. Newton.....	New River.....	...\$3 00
Barley hay, baled.....	Wm. Newton.....	New River.....	...\$3 00
White corn on ear.....	Wm. Newton.....	New River.....	...\$3 00
Alfalfa hay.....	Wm. Newton.....	New River.....	...\$3 00
Red peppers.....	Wm. Newton.....	New River.....	...\$3 00
String beans.....	Wm. Newton.....	New River.....	...\$2 00
Cucumbers.....	Luca Velardez.....	La Dow.....	...\$2 00
Three Mountain Sweet melons.....	Cottle & Moffit.....	Coldwater.....	...\$2 00
Five Iron Clad melons.....	Cottle & Moffit.....	Coldwater.....	...\$2 00
Three Southern Rattlesnake melons.....	Cottle & Moffit.....	Coldwater.....	.....
Six green-fleshed muskmelons.....	Henry Claussen.....	Cahuenga.....	...\$2 00
Long crooked-necked muskmelons.....	J. M. Gessner.....	Los Angeles.....	...\$2 00
Cantaloupe melons.....	P. Durfee.....	Laurel.....	.....
Large and small yellow corn.....	John Hood.....	Downey.....	...\$5 00
Large white corn.....	John Hood.....	Downey.....	...\$3 00
Largest display and varieties of corn.....	John Hood.....	Downey.....	...\$8 00
White onions.....	H. P. Sanborn.....	Artesia.....	...\$3 00
Tomatoes.....	H. P. Sanborn.....	Artesia.....	...\$2 00
Sweet potatoes.....	John Hood.....	Downey.....	...\$5 00
French tomatoes.....	John Hood.....	Downey.....	...\$2 00
Common tomatoes.....	Martin Luper.....	Orangehorpe.....	...\$1 00

AGRICULTURAL DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Three varieties of cabbage	Martin Luper	Orangethorpe	\$3 00
Pumpkins	Martin Luper	Orangethorpe	\$5 00
Long-neck pumpkins	Martin Luper	Orangethorpe	\$3 00
Muskmelons	Martin Luper	Orangethorpe	\$3 00
Home raised cotton	James Stewart	Downey	\$5 00
Best roll of butter	Mrs. A. Skidmore	Downey	\$5 00
Second best roll of butter	Mrs. H. H. Steven- son	Downey	\$3 00
Display of flowering plants	J. W. Jeffries	Los Angeles	\$10 00
Ornamental trees and shrubbery	Miss Lura Cottle	Coldwater	\$10 00
Display of cut flowers	Miss Lura Cottle	Coldwater	\$10 00
Largest display of flowers from one vicinity	Miss Lura Cottle	Coldwater	\$25 00
Cut flowers	M. J. McGaugh	New River	\$5 00
Cut flowers	Mrs. L. M. Grider	Downey	\$2 00
Banana trees	J. D. Valencia	Compton	\$10 00
Bouquet by a child	Miss T. Cottle	Coldwater	\$3 00
Bouquet by a child	Miss L. Workman	Boyle Heights	\$3 00

KITCHEN DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
White bread	Miss Ida Andrus	Los Angeles .....	.....
White bread	Mrs. M. Shepherd	Los Angeles .....	.....
Rye bread	Mrs. M. Shepherd	Los Angeles .....	.....
Brown bread	Mrs. M. Shepherd	Los Angeles .....	.....
Corn bread	Mrs. M. Shepherd	Los Angeles .....	.....
General display of bread	Mrs. M. Shepherd	Los Angeles .....	.....
Soda biscuit	Mrs. M. Shepherd	Los Angeles .....	.....
Raised biscuit	Mrs. M. Shepherd	Los Angeles	\$2 50
Domestic wheat bread, by miss under sixteen years of age	Miss Jennie Ellis	Downey	\$5 00
Brown bread	Mrs. M. L. Andrus	Los Angeles .....	.....
Soda biscuit	Mrs. N. J. Andrus	Los Angeles .....	.....
Raised biscuit	Mrs. N. J. Andrus	Los Angeles .....	.....
Raised biscuit	Mrs. E. F. Scribner	Downey	\$3 00
Corn bread	Mrs. E. F. Scribner	Downey	\$3 00
Brown bread	Mrs. E. F. Scribner	Downey	\$2 50
Wheat bread	Mrs. E. F. Scribner	Downey	\$2 00
General display of bread, six varieties	Mrs. E. F. Scribner	Downey	\$10 00
White bread	Mrs. J. Dunsmoor	Los Angeles	\$5 00
Rye bread	Mrs. J. Dunsmoor	Los Angeles	\$5 00
Brown bread	Mrs. J. Dunsmoor	Los Angeles	\$5 00
Corn bread	Mrs. J. Dunsmoor	Los Angeles	\$5 00
General display of bread, six varieties	Mrs. J. Dunsmoor	Los Angeles	\$5 00
Plain cake	Mrs. J. Dunsmoor	Los Angeles	\$3 00
Soda biscuit	Mrs. J. Dunsmoor	Los Angeles	\$2 50
Raised biscuit	Mrs. J. Dunsmoor	Los Angeles .....	.....
Honey cake	Mrs. J. Dunsmoor	Los Angeles	\$5 00 and Diploma.
General display of cake, seven varieties	Mrs. J. Dunsmoor	Los Angeles	Cake basket, valued at \$7 50.

HORTICULTURAL DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
Six varieties of pears.....	M. J. McGaugh.....	Downey.....	\$5 00
Two varieties of pomegranates.....	M. J. McGaugh.....	Downey.....	\$2 00
Nine varieties of apples.....	M. J. McGaugh.....	Downey.....	\$10 00
Six varieties of apples.....	M. J. McGaugh.....	Downey.....	\$5 00
Nine varieties of apples.....	McKinlay Bros.....	Vernon.....	\$10 00
Six varieties of apples.....	McKinlay Bros.....	Vernon.....	\$8 00
Six varieties of pears.....	McKinlay Bros.....	Vernon.....	\$10 00
Three varieties of pears.....	McKinlay Bros.....	Vernon.....	\$8 00
Three varieties of pears.....	W. Newton.....	New River.....	\$5 00
Six varieties of apples.....	J. K. Brenzinger.....	Downey.....	\$6 00
Two varieties of apples (no irrigation).....	Cottle & Moffit.....	Coldwater.....	Ex. only.
Two varieties of apples.....	Board of Trade.....	San Bernardino.....	\$5 00
Three varieties of apples.....	John Hood.....	Downey.....	\$8 00
Nine varieties of apples.....	A. E. Davis.....	Downey.....	\$8 00
Three varieties of apples.....	A. E. Davis.....	Downey.....	\$5 00
Two plates of peaches.....	James Cumpston.....	Vernon.....	
Three plates of peaches.....	W. D. McClure.....	Vernon.....	
One plate of peaches.....	Mrs. Henry Biays.....	Vernon.....	
Two plates of peaches.....	Cottle & Moffit.....	Coldwater.....	
One plate of peaches.....	Wm. Beagle.....	Vernon.....	
Four plates of peaches.....	F. Sanderson.....	La Dow.....	
Three plates of peaches.....	H. Brown.....	La Dow.....	
Two plates of peaches.....	McKinlay Bros.....	Vernon.....	
Two plates of peaches.....	J. H. F. Jarchow.....	San Gabriel.....	
Three plates of peaches.....	Henry Claussen.....	Cahuenga.....	
Six plates of peaches.....	Board of Trade.....	San Bernardino.....	\$5 00
One plate of peaches.....	Wm. S. Taylor.....	Vernon.....	
One plate of peaches, extra large.....	Sherman Page.....	Santa Fe Springs.....	\$3 00
Largest display of peaches.....	H. L. Montgomery.....	Ranchito.....	\$10 00
Unique display of peaches.....	John Hood.....	Downey.....	\$3 00
One plate of green gage plums.....	Mrs. J. H. Brewer.....	Vernon.....	
Two plates of Hungarian prunes.....	Mrs. J. H. Brewer.....	Vernon.....	\$5 00
Quackenbos plums.....	McKinlay Bros.....	Vernon.....	
Quackenbos plums.....	Miss L. Cottle.....	Coldwater.....	
French prunes.....	Henry Claussen.....	Cahuenga.....	
Bulgarian plums.....	Henry Claussen.....	Cahuenga.....	
Japanese plums.....	Henry Claussen.....	Cahuenga.....	
Green gage plums.....	Henry Claussen.....	Cahuenga.....	
Display of plums.....	Board of Trade.....	San Bernardino.....	\$5 00
Display of quinces.....	F. Sanderson.....	La Dow.....	\$5 00
Display of figs.....	James Root.....	Rivara.....	\$5 00
Display of quinces.....	Mrs. E. F. Scribner.....	Downey.....	\$3 00
Display of quinces.....	James Stewart.....	Downey.....	\$1 00
Two varieties of grapes.....	James Stewart.....	Downey.....	\$5 00
Display of raisin grapes.....	James Stewart.....	Downey.....	\$5 00
Six varieties of grapes.....	James Stewart.....	Downey.....	\$3 00
General display of grapes.....	E. L. Barnett.....	Downey.....	\$15 00
Table grapes.....	Henry Claussen.....	Cahuenga.....	\$10 00
Wine grapes.....	Henry Claussen.....	Cahuenga.....	\$10 00
Display of grapes.....	Board of Trade.....	San Bernardino.....	
Three varieties of grapes.....	James Root.....	Rivara.....	\$3 00
One variety of grapes.....	James Root.....	Rivara.....	\$2 00

SEMI-TROPIC DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
General display of semi-tropic fruit.....	Henry Claussen.....	Cahuenga.....	\$15 00
Best display of oranges.....	Henry Claussen.....	Cahuenga.....	\$15 00
Three varieties of oranges.....	Henry Claussen.....	Cahuenga.....	\$10 00
Two varieties of lemons.....	Henry Claussen.....	Cahuenga.....	\$8 00
One plate of oranges.....	Miss R. Stoneman.....	Alhambra.....	\$3 00
Two plates of seedling oranges.....	W. D. McClure.....	Vernon.....	\$5 00
Seedling oranges.....	McKinlay Bros.....	Vernon.....	
Seedling oranges.....	J. H. F. Jarchow.....	San Gabriel.....	
Three varieties of oranges.....	James Root.....	Rivara.....	\$8 00

SEMI-TROPIC DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Three varieties of lemons	J. M. Moss	San Fernando....	\$10 00
Two varieties of lemons	Board of Trade....	San Bernardino..	.....
Three varieties of lemons	E. L. Barnett	Downey	\$5 00
Two varieties of oranges	H. L. Montgomery..	Ranchito	\$3 00
Six varieties of oranges	Willie Julian	Downey	\$15 00
Display of semi-tropic fruit by a youth..	Willie Julian	Downey	\$6 00

JELLIES, PICKLES, ETC., DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
Pickles	Mrs. W. Caruthers..	Downey	\$3 00
Six varieties of preserves	Mrs. W. H. Marron..	Downey	\$10 00
Eight varieties of jellies	Mrs. W. H. Marron..	Downey	\$6 00
Canned fruit	Mrs. H. S. Flora ..	Maizeland	\$5 00
Jellies	Mrs. H. S. Flora ..	Maizeland	\$3 00
Canned fruit	Mrs. Geo. Skidmore..	Downey	\$5 00
General display of fruit in glass	Mrs. J. Dunsmoor..	Los Angeles	\$8 00
Two jars of raspberry jelly	Mrs. J. Dunsmoor..	Los Angeles	\$2 50
Two jars of currant jelly	Mrs. J. Dunsmoor..	Los Angeles	\$2 50
Two jars of blackberry jelly	Mrs. J. Dunsmoor..	Los Angeles	\$2 50
Two jars of strawberry jelly	Mrs. J. Dunsmoor..	Los Angeles	\$1 50
Two jars of quince jelly	Mrs. J. Dunsmoor..	Los Angeles	\$1 50
Two jars of blackberry jam	Mrs. J. Dunsmoor..	Los Angeles	\$1 50
Two jars of raspberry jam	Mrs. J. Dunsmoor..	Los Angeles	\$1 50
Best display of preserves in glass	Mrs. J. Dunsmoor..	Los Angeles	\$5 00
Display of pickles	Mrs. J. Dunsmoor..	Los Angeles	\$3 00
DRIED FRUITS.			
Twenty-five pounds of sun-dried peaches	F. Sanderson	La Dow .....	.....
Twenty-five pounds of dried peaches....	Board of Trade....	San Bernardino..	\$5 00
Twenty-five pounds of dried apricots....	Board of Trade....	San Bernardino..	\$5 00
Dried figs	James Stewart	Downey	\$5 00
Twenty-five pounds of dried apples	James Root	Rivara	\$5 00
Sun-dried peaches	James Root	Rivara	\$5 00
General display of dried fruits	James Root	Rivara	\$10 00
Soft shell English walnuts	James Root	Rivara	\$5 00

MISCELLANEOUS DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
Ground nutmeg melons	J. Wolfskill	Buenos Ayres R..	.....
Plate of nectarines	Miss L. Cottle	Coldwater .....	.....
King Philip corn	C. A. Coffman	Ranchito .....	.....
Bale of oat hay	G. W. Rogers	Los Angeles	\$2 00
Best county display	Board of Trade....	San Bernardino..	\$25 00
Self-raised grapes	W. J. A. Smith	Los Angeles	Ex. only.
Kittatinny blackberries	Mrs. Jas. Cumpston..	Vernon	\$2 00
Two plates of nectarines	W. D. McClure	Vernon .....	.....
Two plates of red nectarines	Mrs. J. H. Brewer..	Vernon .....	.....
One plate of yellow nectarines	Mrs. J. H. Brewer..	Vernon	\$1 00
One plate of Flemish Beauty pears	Mrs. J. H. Brewer..	Vernon	\$1 00
One plate of Bartlett pears	William Beagle	Vernon .....	.....
One plate of white nectarines	William Beagle	Vernon .....	.....
One plate of red nectarines	William Beagle	Vernon	\$1 00
Daley's patent sash	H. D. Ley	Los Angeles	Diploma.
Two plates of tomatoes	Luca Velardez	La Dow	\$1 00
Wire stretcher	J. H. Pounds	San Francisco..	Diploma.
Two sheaves of millet	J. H. Moffit	Coldwater	Ex. only.
Corn on stalk and ear	J. H. Moffit	Coldwater	Ex. only.
Orange quinces	McKinlay Bros.	Vernon	Ex. only.
Bartlett pears	J. H. F. Jarchow ..	San Gabriel	Ex. only.
Hand-made hammock	W. H. C. Brotherton	Santa Monica ..	Diploma.

SPEED PROGRAMME.

MONDAY, AUGUST 6, 1888.

RACE No. 1—RUNNING.

For two-year olds. Purse, three hundred dollars. One hundred and ninety-five dollars to first horse; seventy-five dollars to second; thirty dollars to third. One half-mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Odette, ch. f., by Shiloh; dam, Margery	B. P. Hill	El Cajon.
Four Aces, ch. c., by Hockhocking; dam, Maid of the Mist	John D. Dunn	Los Angeles.
Othello, b. c., by Hockhocking; dam, Sunday	E. R. Den	Santa Barbara.
Ulpeano, ch. g., by Jim Brown; dam, Eliza	P. C. Dornalech	Los Angeles.
Naicho B, ch. g., by Wanderer; dam, Flower Girl	P. C. Dornalech	Los Angeles.
Lady Helen, b. f., by Norfolk; dam, Jessie R.	Thomas H. Williams	San Francisco.
Wild Oats, b. c., by Wildidle; dam, Mary Givens	W. L. Appleby	Santa Clara.
Senovia, ch. f., by Billy Lee; dam, Belle Mason	H. H. Fields	Los Angeles.
Fandango, ch. c., by Billy Lee; dam, Lorinda	H. H. Fields	Los Angeles.
Cordova, b. c., by Balboa; dam, Armada Howard	Charles H. Thomas	San Jacinto.

SUMMARY.

Lady Helen	1
Fandango	2
Wild Oats	3

Odette left at post. Balance ran unplaced.

Time—0:50½.

RACE No. 2—RUNNING.

All ages. Purse, four hundred and fifty dollars. Two hundred and ninety dollars to first horse; one hundred and fifteen dollars to second; forty-five dollars to third. Mile dash. Weight for age.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Sprey, ch. m. (5), by Joe Hooker; dam, Big Gun.	Nat Shinnors	Sacramento.
Idalene Cotton, ch. f. (4), by Jim Brown; dam, Lizzie P	Maltese Villa Stables	Merced.
Moses B, ch. c. (3), by Leinster; dam, Aunt Jane	M. G. Bryant	Phoenix, Ariz.
Carmalita, b. f. (4), by Hardwood; dam, unknown	Al. Morine	San Diego.
John Treat, g. g. (5), by Shiloh; dam, unknown	Al. Morine	San Diego.
Gladstone, ch. g. (4), by Reveille; dam, unknown	B. P. Hill	El Cajon.
Consuelo, b. s. (5), by Grinstead; dam, Nina R.	E. R. Den	Santa Barbara.
Welcome, br. f. (3), by Warwick; dam, Aeola	Pacific Stables	Los Angeles.
Del, blk. g. (3), by Falsetto; dam, Mattie Severn	P. C. Dornalech	Los Angeles.
Oro, b. s. (4), by Norfolk; dam, Golden Gate	Owens Bros.	Fresno.

SUMMARY.

Laura Gardner	1
Moses B.	2
Idalene Cotton	3

Balance ran unplaced.

Time—1:43 $\frac{3}{4}$.

RACE NO. 3—PACING.

Free for all. Purse, six hundred dollars. Three hundred dollars to first horse; one hundred and fifty dollars to second; ninety dollars to third; sixty dollars to fourth. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Patchen T, b. g., pedigree unknown	N. A. Comstock	San Diego.
San Diego, b. g., by Victor; dam, thoroughbred	H. C. Airhart & Co.	San Diego.
Belmont Boy, ch. g., by Nutwood; dam, Lady Vernon	C. H. Corey	San José.
Goldleaf, ch. f. (3), by Sidney; dam, Fernleaf	Pleasanton Stock Farm	Pleasanton.

SUMMARY.

Goldleaf	1	1	1
Belmont Boy	2	2	4
San Diego	3	3	2
Patchen T	4	4	3

Time—2:26; 2:23 $\frac{1}{2}$; 2:29 $\frac{3}{4}$.

RACE NO. 4—TROTTING.

2:45 Class. Purse, one thousand dollars. Five hundred dollars to first horse; two hundred and fifty dollars to second; one hundred and fifty dollars to third; one hundred dollars to fourth. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Albion, b. h., by Gen. Benton; dam, Amy	Chino Ranch	Chino.
Pink, ch. m., by Inca; dam by Echo	J. H. Kelly	San Bernardino.
Dick Richmond, g. h., by A. W. Richmond; dam, unknown	C. A. Durfee	Los Angeles.
Aldeana, b. f., by Electioneer; dam, Eliza Dolph	Palo Alto Stock Farm	Menlo Park.
Maggie E, b. m., by Nutwood; dam by George M. Patchen	S. B. Emerson	San José.

SUMMARY.

Maggie E	2	1	1	1
Pink	1	2	3	2
Dick Richmond	3	3	2	3
Albion	5	5	4	4
Aldeana	4	4	dr.	

Time—2:30 $\frac{1}{2}$; 2:27; 2:25 $\frac{1}{4}$; 2:30.

TUESDAY, AUGUST 7, 1888.

RACE No. 6—TROTTING.

Southern California Trotting Stake. For three-year olds. Closed December 1, 1886, with eleven nominations. Walkover for C. A. Durfee's b. s. Raymon, by Simmons; dam, Lady Raymon. Value to winner, two hundred and thirty-five dollars.

RACE No. 7—TROTTING.

2:23 Class. Purse, one thousand dollars. Five hundred dollars to first horse; two hundred and fifty dollars to second; one hundred and fifty dollars to third; one hundred dollars to fourth. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Alcazar, b. s., by Sultan; dam, Minnie Ha Ha	L. J. Rose -----	Los Angeles.
Valentine, b. g., by Ferral's Clay; dam, Queen	J. H. Kelly -----	San Bernardino.
Gertrude Russell, b. m., by Electioneer; dam, Dame Winnie	Palo Alto Stock Farm	Menlo Park.
Maid of Oaks, ch. m., by Duke McLellan	Pleasanton St'k Farm	Pleasanton.
Alfred S, b. g., by Elmo; dam, Nora Marshall	W. H. Seale -----	Mayfield.

SUMMARY.

Alfred S -----	1	3	1	1
Valentine -----	2	1	2	3
Maid of Oaks -----	3	2	3	2

Time—2:21; 2:25; 2:23½; 2:25.

SPECIAL RACE.

2:35 Class. District trotting. Purse, three hundred dollars. One hundred and fifty dollars to first horse; seventy-five dollars to second; forty-five dollars to third; thirty dollars to fourth. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Dubec, b. g., by Sultan	L. J. Rose -----	Los Angeles.
Woolsey, b. s., by Electioneer; dam, Waxana	Chino Ranch -----	Chino.
Pond Lily, b. m., by Geo. M. Patchen	J. B. Mason -----	Los Angeles.
Don Tomas, blk. g., by Del Sur	C. A. Durfee -----	Los Angeles.

SUMMARY.

Don Tomas -----	1	1	1
Dubec -----	2	2	2
Pond Lily -----	3	3	3

Time—2:28½; 2:28½; 2:26½.

WEDNESDAY, AUGUST 8, 1888.

RACE No. 8—RUNNING.

For three-year olds. Purse, four hundred dollars. Two hundred and sixty dollars to first horse; one hundred dollars to second; forty dollars to third. Three-fourths of a mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Heliotrope, b. f., by Joe Hooker; dam, Yolone	Mrs. S. B. Wolfskill	Santa Monica.
Welcome, br. f., by Warwick; dam, Aeola	Pacific Stables	Los Angeles.
Del, blk. g., by Falsetto; dam, Mattie Severn	P. C. Dornalech	Los Angeles.
Carmen, ch. f., by Wildidle; dam, Nettie Brown	W. L. Appleby	Santa Clara.
Serpolette, ch. f., by Norfolk; dam, Mattie Glenn	Owens Bros.	Fresno.

SUMMARY.

Carmen	1
Heliotrope	2
Welcome	3
Serpolette	4

Time—1:15½.

RACE No. 9—RUNNING.

For all ages. Purse, six hundred dollars. Weight for age. Three hundred and ninety dollars to first horse; one hundred and fifty dollars to second; sixty dollars to third.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Idalene Cotton, ch. m. (4), by Jim Brown; dam, Lizzie P	Maltese Villa Stables	Merced.
Heliotrope, b. f. (3), by Joe Hooker; dam, Yolone	Mrs. S. B. Wolfskill	Santa Monica.
Moses B, ch. c. (3), by Leinster; dam, Aunt Jane	M. S. Bryant	Phoenix, A. T.
John Treat, g. g. (5), by Shiloh; dam, by Norfolk	Al. Morine	San Diego.
Carmalita, b. f. (4), by Hardwood; dam, by Shiloh	Al. Morine	San Diego.
Four Aces, ch. c. (2), by Hockhocking; dam, Maid of the Mist	John D. Dunn	Los Angeles.
Consuelo, b. s. (5), by Grinstead; dam, Nina R.	E. R. Den	Santa Barbara.
Ed McGinnis, b. c. (3), by Grinstead; dam, Jennie G	Pacific Stables	Los Angeles.
Laura Gardner, b. m. (4), by Jim Brown; dam, Avail	W. L. Appleby	Santa Clara.
Oro, b. c., by Norfolk; dam, Golden Gate	Owens Bros.	Fresno.

SUMMARY.

Laura Gardner	1
Idalene Cotton	2
John Treat	3
Moses B.	4

Time—2:07¼.

RACE No. 10—TROTTING.

Stake for three-year olds. Closed March fifteenth. Three entries. Two hundred and twelve and one half dollars to first horse; eighty-seven and one half dollars to second. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Gossiper, b. s., by Simmons	C. A. Durfee	Los Angeles.
Direct, blk. s., by Director	Pleasanton Stock Farm	Pleasanton.

SUMMARY.

Direct	1	1	1
Gossiper	2	2	2

Time—2:38; 2:29½; 2:30½.

RACE No. 11—TROTTING.

Free for all. Purse, twelve hundred dollars. Six hundred dollars to first horse; three hundred dollars to second; one hundred and eighty dollars to third; one hundred and twenty dollars to fourth. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Stamboul, b. s. (5), by Sultan; dam, Fleetwing	L. J. Rose	Los Angeles.
Manzanita, b. m. (6), by Electioneer; dam, Mayflower	Palo Alto Stock Farm	Menlo Park.
Arab, b. g. (aged), by Arthurton; dam, Lady Hamilton	O. A. Hickok	San Francisco.

SUMMARY.

Stamboul	1	1	1
Arab	2	2	2

Time—2:15; 2:17½; 2:16¾.

THURSDAY, AUGUST 9, 1888.

RACE No. 12—RUNNING.

For two-year olds, foals of 1886. Stake closed December 1, 1886, with fourteen nominations. All declared but following. Value of stake to winner, three hundred and sixty-eight dollars; to second, one hundred and eighty-four dollars; to third, fifty-nine dollars. One mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Wild Oats, b. c., by Wildidle; dam, Mary Givens	W. L. Appleby	Santa Clara.
Fandango, ch. c., by Billy Lee; dam, Lorinda	H. H. Fields	Los Angeles.
Four Aces, ch. c., by Hockhocking; dam, Maid of the Mist	John D. Dunn	Los Angeles.

SUMMARY.

Four Aces	1
Wild Oats	2
Fandango	3

Time—1:47½.

RACE No. 13—RUNNING.

All ages. Weight for age. Purse, four hundred dollars. Two hundred and sixty dollars to first horse; one hundred dollars to second; forty dollars to third. Three-quarter mile heats.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Elwood, ch. g. (4), by Norfolk; dam, Ballinette.	Maltese Villa Stables	Merced.
Mikado, ch. g. (4), by Shiloh; dam, Margery	B. P. Hill	El Cajon.
Gladstone, ch. g. (4), by Reveille	B. P. Hill	El Cajon.
Red Jacket, b. g. (aged), by Woodman; dam, Nancy Wight	O. M. Converse	Los Angeles.
Consuelo, b. s. (5), by Grinstead; dam, Nina R.	E. R. Den	Santa Barbara.
Del, blk. g. (3), by Falsetto; dam, Mattie Severn	P. C. Dornalech	Los Angeles.
Welcome, br. f. (3), by Warwick; dam, Aeola	Pacific Stables	Los Angeles.
Carmen, ch. f. (3), by Wildidle; dam, Nettie Brown	W. L. Appleby	Santa Clara.
Serpolette, ch. f. (3), by Norfolk; dam, Mattie Glenn	Owens Brothers	Fresno.

SUMMARY.

Carmen	1 1
Gladstone	2 2
Consuelo	3 3
Elwood	dis.

Time—1:20½; 1:20½.

RACE No. 14—TROTTING.

Trotting stake for two-year olds, foals of 1886. Closed December 1, 1886, with eleven nominations. All declared or paid forfeit except below. Value to first horse, two hundred and ninety-seven dollars; to second, one hundred and forty-eight and one half dollars. Mile heats; two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Vesolia, b. f., by Stamboul; dam, Inez, by The Moor	L. J. Rose	Los Angeles.
Tono, ch. c., by Judge Salisbury; dam by Whipple's Hambletonian	N. A. Covarrubias	Los Angeles.

SUMMARY.

Vesolia	1 1
Tono	2 2

Time—2:46½; 2:35.

RACE No. 15—TROTTING.

2:30 Class. Purse, one thousand dollars. Five hundred dollars to first horse; two hundred and fifty dollars to second; one hundred and fifty dollars to third; one hundred dollars to fourth. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Don Tomas, blk. g. (aged), by Del Sur; dam, by Mambrino Patchen	C. A. Durfee	Los Angeles.
Elector, b. s., by Electioneer; dam, Lady Babcock	O. A. Hickok	San Francisco.
Franklin, blk. g., by General Reno	Chas. Davis & Co.	San Francisco.
Express, b. g., by Electioneer; dam, Esther, by Express	Palo Alto Stock Farm	Menlo Park.

SUMMARY.

Franklin	1	3	1	2	1
Elector	4	1	2	1	2
Don Tomas	0	2	4	3	3
Express	0	4	3	4	4

Time—2:28; 2:21 $\frac{1}{4}$; 2:22 $\frac{3}{4}$; 2:23; 2:25.

FRIDAY, AUGUST 10, 1888.

RACE No. 16—RUNNING.

Stake for three-year olds; foals of 1885. Closed December 1, 1886, with eight nominations. All closed paid forfeit or declared except below. Dash of one and one half miles. Value to winner, three hundred and twelve dollars; one hundred and fifty-six dollars to second.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Origin, b. s., by Hardwood; dam, Mollie Adams.	-----	-----
Ed. McGinnis, b. s., by Grinstead; dam, Jennie G.	-----	-----

SUMMARY.

Ed. McGinnis	1
Origin	2

Time—2:50.

SPECIAL RUNNING.

For two-year olds. Purse, one hundred dollars. Sixty-five dollars to first horse; twenty-five dollars to second; ten dollars to third. Five eighths of a mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Naicho B, ch. g., by Wanderer; dam, Flower Girl	P. C. Dornalech	Los Angeles.
Fandango, ch. c., by Billy Lee; dam, Lorinda.	H. H. Fields	Los Angeles.
Futurity, blk. f., by John A	W. L. Appleby	Santa Clara.

SUMMARY.

Naicho B } dead heat—first place {	0	1	} run off.
Futurity }	0	2	
Fandango }	3		

Time—1:04; 1:05.

RACE No. 17—RUNNING.

All ages. Weight for age. Purse, four hundred dollars. Two hundred and sixty dollars to first horse; one hundred dollars to second; forty dollars to third. Three quarters of a mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Sprey (formerly Queen Kapoliana), ch. m. (5) by Joe Hooker; dam, Big Gun	Nat Shinnors	Sacramento.
Idealene Cotton, ch. m. (4), by Jim Brown; dam, Lizzie P	Maltese Villa Stable	Merced.
Heliotrope, b. f. (3), by Joe Hooker; dam, Yolone	Mrs. S. B. Wolfskill	Santa Monica.
Adam, b. g. (5), by Reveille	B. P. Hill	El Cajon.

RACE No. 17—RUNNING—Continued.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Carmalita, b. m. (4), by Hardwood; dam, by Shiloh	Al. Morine	San Diego.
Typesetter, b. c. (3), by Hockhocking; dam, by Ben Wade	John D. Dunn	Los Angeles.
Consuelo, b. s. (5), by Grinstead; dam, Nina R.	E. R. Den	Santa Barbara.
Welcome, b. m. (3), by Warwick; dam, Aeola	Pacific Stables	Los Angeles.
Del, blk. g. (3), by Falsetto; dam, Mattie Severn	P. C. Dornalech	Los Angeles.
Carmen, ch. m. (3), by Wildidle; dam, Nettie Brown	W. L. Appleby	Santa Clara.
Johnny Gray, g. g. (aged), by Shiloh; dam, Margery	George Howson	Sacramento.

SUMMARY.

Carmen	1
Heliotrope	2
Johnny Gray	3

Balance unplaced.

Time—1:15.

SPECIAL TROTTING.

For two-year olds. Purse, one hundred and fifty dollars. One hundred dollars to first horse; fifty dollars to second. Mile heats; two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Sunol, b. f., by Electioneer	Palo Alto Stock Farm	Menlo Park.
Vesolia, b. f., by Stamboul	L. J. Rose	Los Angeles.

SUMMARY.

Sunol	1	1
Vesolia	2	2

Time—2:32½; 2:25.

RACE No. 18—TROTTING.

3:00 Class. District horses. L. J. Rose's stable barred. Purse, three hundred dollars. One hundred and fifty dollars to first horse; seventy-five dollars to second; forty-five dollars to third; thirty dollars to fourth. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Danger, b. g., by Odd Fellow	John B. Kennedy	Santa Ana.
Albion, b. s., by Gen. Benton	Chino Ranch	Chino.
Woolsey, b. g., by Electioneer; dam, Waxana	Chino Ranch	Chino.
Pink, ch. m., by Inca	J. H. Kelly	San Bernardino.
Dick Richmond, g. s., by A. W. Richmond	C. A. Durfee	Los Angeles.

SUMMARY.

Pink	2	1	1	1
Albion	1	3	3	3
Dick Richmond	3	2	2	2

Time—2:29; 2:29½; 2:30; 2:31½.

RACE NO. 19—TROTTING.

2:20 Class. Purse, one thousand dollars. Five hundred dollars to first horse; two hundred and fifty dollars to second; one hundred and fifty dollars to third; one hundred dollars to fourth. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Valentine, b. g., by Ferral's Clay, dam, Queen ..	J. H. Kelly	San Bernardino.
Conde, ch. g., by Abbotsford; dam, Katie Prior.	O. A. Hickok	San Francisco.
Hinda Rose, b. f., by Electioneer; dam, Beautiful Bells	Palo Alto Stock Farm	Menlo Park.
Maid of Oaks, ch. m., by Duke McLellan.	Pleasanton St'k Farm	Pleasanton.
Alfred S, b. g., by Elmo; dam, Nora Marshall ..	W. H. Seale	Mayfield.

SUMMARY.

Alfred S	1	1	1
Maid of Oaks	2	2	2
Valentine	3	3	3

Time—2:22½; 2:22¼; 2:21¼.

RACE NO. 22—TROTTING.

Stake race for four-year olds. Closed March 15, 1888. Three entries. Value to winner, two hundred and fifteen dollars and fifty cents; to second, eighty-seven dollars and fifty cents. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Dubec, b. g., by Sultan; dam, by Cal Dexter	L. J. Rose	Los Angeles.
Ella, b. m., by Electioneer; dam, Lady Ella	Palo Alto Stock Farm	Menlo Park.
Carlisle, ch. c., by Piedmont; dam, Idabelle	Palo Alto Stock Farm	Menlo Park.

SUMMARY.

Dubec	1	1	1
Ella	2	2	2

Time—2:28; 2:28½; 2:28½.

SATURDAY, AUGUST 11, 1888.

RACE NO. 23—TROTTING.

2:25 Class. Purse, one thousand dollars. Five hundred dollars to first horse; two hundred and fifty dollars to second; one hundred and fifty dollars to third; one hundred dollars to fourth. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Jim Blaine, blk. g., by Pathfinder	E. B. Gifford	San Diego.
Azmoor, b. c., by Electioneer; dam, Mamie C. ...	Palo Alto Stock Farm	Menlo Park.
Express, b. g., by Electioneer; dam, Esther, by Express	Palo Alto Stock Farm	Menlo Park.
Longfellow, ch. g., by Whipple's Hambletonian.	W. H. Seale	Mayfield.
Maggie E, b. m., by Nutwood; dam, by Mambrino Patchen	S. B. Emerson	San José.

SUMMARY.

Maggie E.....	4	1	1	1
Longfellow.....	1	3	3	2
Jim Blaine.....	2	4	2	3
Express.....	3	2	4	4

Time—2:29; 2:23; 2:27 $\frac{1}{4}$; 2:29.

RACE NO. 20—RUNNING.

All ages. Purse, three hundred and fifty dollars. Two hundred and seven dollars and fifty cents to first horse; ninety-seven dollars and fifty cents to second; thirty-five dollars to third. Weight for age. Half-mile heats.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Tam Poco, ch. g. (aged), by Bowhocks.....	J. C. Hickey.....	Santa Ana.
Silverella, ch. m. (6), by Reveille.....	B. P. Hill.....	El Cajon.
Adam, ch. g. (5), by Reveille.....	B. P. Hill.....	El Cajon.
Sleepy Dick, ch. g. (6), by Joe Daniels.....	F. M. Starkey.....	Stockton.
Typesetter, b. c. (3), by Hockhocking.....	John D. Dunn.....	Los Angeles.
Johnny Gray, g. g., by Shiloh.....	Geo. Howson.....	Sacramento.

SUMMARY.

Sleepy Dick.....	1	1
Johnny Gray.....	2	2
Adam.....	3	3
Typesetter.....	dis.	

Time—0:49 $\frac{1}{4}$; 0:49 $\frac{1}{4}$.

RACE NO. 21—RUNNING.

Consolation free purse, two hundred and fifty dollars. One hundred and sixty-five dollars to first horse; sixty dollars to second; twenty-five dollars to third. Weight for age. One mile.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Idalene Cotton, ch. m. (4).....	Maltese Villa Stables..	Merced.
John Treat, g. g. (5).....	Al. Morine.....	San Diego.
Carmalita, b. m. (4).....	Al. Morine.....	San Diego.
Welcome, br. f. (3).....	Pacific Stables.....	Los Angeles.
Elwood, ch. g. (4).....	Maltese Villa Stables..	Merced.
Oro, b. s. (4).....	Geo. Howson.....	Sacramento.

SUMMARY.

Welcome.....	1
John Treat.....	2
Idalene Cotton.....	3
Elwood.....	4
Carmalita.....	5
Oro.....	6

Time—1:43.

TRANSACTIONS
OF THE
SEVENTH DISTRICT AGRICULTURAL ASSOCIATION

For the Year 1888,

Composed of the Counties of Monterey and San Benito.

OFFICERS OF THE ASSOCIATION.

J. D. CARR	President.
JOHN J. KELLY	Secretary.
WM. VANDERHURST	Treasurer.

DIRECTORS.

J. D. CARR	Salinas City.
J. B. IVERSON	Salinas City.
M. LYNN	Salinas City.
PARIS KILBURN	Salinas City.
W. L. CARPENTER	Salinas City.
H. COREY	Salinas City.
B. V. SARGENT	Monterey.
DR. THOMAS FLINT	San Juan South.

REPORT.

SALINAS CITY, December 12, 1888.

To the honorable the State Board of Agriculture:

GENTLEMEN: The Directors of the Seventh District Agricultural Association submit this, their report of the transactions of said association, for the year ending this date.

JOHN J. KELLY, Secretary.

RECEIPTS AND EXPENDITURES.

Receipts.

Rent of pavilion	\$190 00	
Sale of privileges	718 00	
Single admission tickets	1,185 50	
Annual membership	345 00	
Season tickets	84 00	
Badges	65 00	
Entrance money	675 00	
State warrant	1,500 00	
		<u>\$4,762 50</u>

Expenditures.

Premiums and purses	\$2,657 00	
Discount	20 00	
Printing and advertising	168 50	
Music	160 00	
Insurance	82 50	
National Trotting Association	56 00	
Material	504 06	
Labor	425 95	
Gas and water	44 80	
Freight, expressage, and postage	13 50	
Cash on hand	630 19	
		<u>\$4,762 50</u>

ANNUAL ADDRESS.

Delivered by REV. GEORGE McCORMICK, before the Monterey District Agricultural Association, Salinas City, October 5, 1888.

MR. PRESIDENT, MEMBERS OF THE AGRICULTURAL ASSOCIATION, LADIES AND GENTLEMEN: As I understand the duty I have somewhat rashly assumed at the eleventh hour of addressing you this evening, it is largely that of a Fourth of July oration, based not so much on the political and general greatness of our common country as on the material resources particularly represented at this fair. The subject is neither unfamiliar nor uninteresting to me. I am not in the embarrassing predicament of the Chaplain of George III, of England, after the Revolutionary war. The King appointed a day of thanksgiving. The Chaplain came to him to inquire what they were to give thanks for. "Was it the loss of thirteen of the richest colonies of the kingdom?" "No," said the King. "Was it for the loss of the fine armies that had suffered defeat in America?" "No." "Well, what was it for?" "Why," said the King, "because the thing is no worse than it is." He was making the best of a bad bargain. The people who live in Monterey and San Benito Counties certainly have natural advantages which relieve them from all embarrassments of this kind. We have a goodly heritage, and the lines have fallen to us in pleasant places. It is hard for an old resident to understand how a new comer can be homesick or discontented. This is not one of the places that are celebrated as good to emigrate from. It is justly celebrated as one of the best under the sun to immigrate to. The unprecedented tide of immigration that has rolled in upon California during the last few years, and of which our particular section has had its full share, considering the disadvantages under which we have labored, and which I will mention more particularly further on, fully vindicate the above statement.

Why, then, is our country one of the best under the sun to immigrate to? In other words, what are the essential elements of a good country, and how can these best be handled so as to make the most of them?

1. Rich and varied natural resources and attraction. We certainly have these. The farmer finds here the richest of soils. In this respect we have scarcely a superior in all our State. Our ranch owners have no cause to complain. As evidence of their prosperity, I notice a number of fine ranch houses in process of erection, of a class that does great credit to our valley. The thousands of dollars thus invested have been made on the ground, and not imported from abroad. Others of a like class will soon follow, greatly adding to the thrifty appearance of the country, and helping to invite new settlers of the best class. The stock raiser finds here multiplied advantages. He needs no expensive provision for long, bitter winters. The blizzard never finds him. The varied growths of hills and plains are all in his favor. The fruit grower has long since passed the period of experiment. Enough has been done to prove that in quality and variety of our fruits we can compete well with any other county in the State. This is an industry that should receive the special attention of our people, and will well repay

all the care bestowed upon it. The miner is finding in some sections of our county rich deposits of coal, oil, marble, and precious metals. It is generally believed that more thorough and general prospecting will greatly increase this source of wealth. In climate we are literally unsurpassed. We have no hard winters or hot summers. Our gardens thrive and our flowers bloom all the year. A good tent or a board hut is ample shelter from our worst storms. An hour's drive from the valley into the shelter of the foothills, or up the mountain side, gives a more complete change of climate than a day's travel in the Eastern States. Fever and ague cannot live among us. We laugh at malaria. If rheumatism or dyspepsia ever threaten us we bathe in and drink from our unexcelled hot mineral springs and forget our ills. Our natural scenery is both pleasing and varied. In its diversity of mountain, hill, valley, and cañon, it cannot fail in presenting homelike reminders to comers from all quarters. Nature has certainly dealt us her bounties with a lavish hand, and God has made here one of earth's richest, choicest dwelling places. In all the essentials of thrifty, prosperous, comfortable existence we have no lack in our natural resources and attractions. Our foundation is the very best.

2. The next essential of a good country is that it be in close connection with the outside world.

Time was when the hunter and the squatter were the pioneers. They were the principal agents in opening up a new country. The main appliances of civilization were expected to follow in their wake. All this has changed. We live too fast for it now. The locomotive, and the printing press, with the school, the church, and the town, are our pioneers. In proof of this assertion notice the settlement of the southern part of this county since the extension of the railroad from Soledad to Templeton. True, it was settled before. But the advent of the locomotive was the signal for the readjustment of settlement that has almost amounted to an entire change in this respect. New towns sprung up as by magic all along the railroad line. Stores, shops, churches, schools came with the towns. People flocked in and filled up the country, occupying Government land and buying homes, until that section is peopled and improved as never before. This is but a very small specimen of what is being done all over the great West to-day. You have noticed that the multiplication of transcontinental railroads has brought the boom times to Southern California. No sooner could people reach that favored section with ease and cheapness than its natural attractions brought them by the tens of thousands. Here has been one of the greatest drawbacks to the proper settlement of our section. We have lived in a corner. We have been off the lines of travel mostly used by strangers. We have not advertised ourselves extensively. As a result, comparatively few home-seekers have ever found us. The tourist has missed us. But now that our railroad is having its last link forged that is to make it one of the great transcontinental chains, we may hope for better things. The home-seeker and the tourist will no longer miss us. The great bulk of the travel to the far-famed "Cape May of the Pacific" must pass through our valley. Let its fair acres be offered for homes, in quantities to suit, and on reasonable terms, and our tenantry system will soon be a thing of the past. The redwood shanty and the tumble-down barn, the treeless, yardless, cheerless renters quarters, so often met with now, will give place to such homes as in most places already adorn the premises of our ranch owners. When I spend a week or two among the colonies in Fresno County, and see what irrigation and small home holdings can do for a country, I grow more than ever impatient for some change of conditions that will advance our material interest, not simply to par,

but above par, with naturally poorer sections that are outstripping us in their progress. Do not understand me as finding fault with the capitalist. We must have him, to make public improvements, to put our lands on the market, and in every respect to manage the opening settlement of our country. The time has come when the wealthy man, rather than the poor man, must be the pioneer. The man who controls vast tracts of land can, if he will, bring in whole colonies, and settle up the country by wholesale. If I am accused of giving undue prominence to increase of population, my response is that this develops the resources of any country as does nothing else. The man who sells ten thousand acres to small farmers, and then wonders what he is to do with his capital, will find in the settlers to whom he has sold his acres opportunities of investing unthought of before. To begin with, they pay him interest on two thirds or three fourths of the unpaid principal of their purchase. Many of them must, in addition, have help in making their improvements. In this way, for years to come, he has a safe and remunerative investment, and the satisfaction of seeing the wealth of the country increase as it could not before. I grant you that I view this matter from a standpoint entirely outside of ideas that a capitalist might regard as at all practical. I may be altogether visionary. If so, I hope to be pardoned, and am quite sure no harm can come of idle dreams. With the release of capital with large land holdings, and the consequent increase of population, must come the demand for manufactures, mills, etc., and the financial ability to meet it, to the great gain of the material interests of the community.

Not alone through our railroads must we have connection and communication with the outside world. Through our press, the widespread exhibition of our products, our Boards of Trade, and all other means and methods of modern advertising, we must make our resources and advantages known abroad. I have faith in judicious and liberal advertising. We Californians get credit for stretching the truth considerably in this matter, but the accusation comes largely, of course, from the ignorance of those who have never seen for themselves. We "truthful Johns" always try to tell less rather than more than we can substantiate. Even then they will not believe us in many instances till they come and see for themselves that the half has not been told them. A California minister some years ago lectured one evening in the church of a brother clergyman in one of the Eastern States, on California. He did his best to keep within bounds that would be believed. Next Sabbath he preached in the same pulpit. One of the elders with his whole family was absent. Such a thing had never happened without good cause, and the pastor called on Monday morning to learn what was wrong. They were in good health, "but that California preacher had told so many whoppers in his lecture that it was no use trying to listen to his preaching with any edification," and so they had remained away. For all that, fellow citizens, we must let the world hear from us if we expect them to notice us. We must advertise.

That is what we are trying to do in our district. We gather here our best live stock, and we can make an exhibition in this respect of which we are justly proud. I well remember that fifteen years ago the mustang was thought good enough for the farm team. What was known as American stock was counted extra, especially for driving purposes; but the mustang, the broncho, and even the American, are largely out of date to-day. In their places we have the very best classes of imported and thoroughbred stock. It is a pleasure to every lover of good horses to watch our heavy teams as they haul our grain to market. I have never seen in any other

section of the country either their equal or superior. On racing stock I am not well posted; but I do know that when it comes to buying a good roadster for family use—one you know that has good blood, is gentle, well broke, and cannot be dusted in the face by every other team on the road—they are all so superior in quality, and in price, that a poor man begins to think he had better walk, or get a bicycle. We gather here also the best products of our farms, our dairies, our shops, our stores, and the choicest handiwork of our fair women. We arrange them in attractive display in our spacious pavilion. We offer prizes for the very best. We say to the world, come and see how well we can do. Wouldn't you like to live in such a country, among such a people? In inquiring for points for this address, I found one of our good ladies who is greatly interested in the success of our fair, and who contributes largely to it, very much dissatisfied with the cutting down of the premium list at the pavilion. If she is right, and there are, I find, plenty who agree with her, this ought to be augmented rather than diminished. It ought to fill this spacious building for the exhibition of our products after the most artistic and attractive fashion, and then crowd it with the most and the best in every department of our industries. I am fully persuaded that the time has come when we must make our exhibitions a more prominent feature, or fall behind in our competition with other parts of our State for our full share of the general prosperity.

You and I have also learned long ago, Mr. President, that it will not do to even seem to discourage or underrate the work done by our good ladies in any department of life. To their taste, skill, and untiring energies our district fairs have owed much of their success, and I bespeak for them the fullest encouragement in the exhibition of their handiwork.

3. Another essential of a good country is good schools. The school is another pioneer of modern civilization. California ranks high in her public school system. She can justly be very proud of it. Its standard is exceptionally high. It pays good wages to its teachers. It grows and trains these largely out of the ranks of its own scholars. We can boldly say to every parent contemplating a home with us: "We can furnish you a first class common school education for your children." We can offer also a university course that is unexcelled. If we lack in anything in the public school system, as I am acquainted with it, it is an academical link between the common school and the university. Some of the older States excel us in this respect. We should copy their example, and in the public schools of at least every county seat have a department that would classically and scientifically fit pupils for the sophomore class of any college in the land. I trust the day is not far distant when this defect will be remedied. As far as we have gone, our public schools are of the best, and we are not ashamed to advertise them as such. Nor can we afford to underrate them as a prime essential of a good country.

Their exhibit at the late meeting of the National Educational Association was most creditable, and I am sorry it is not before the public in this pavilion, as it was lately during our County Teachers' Institute. It is only one of a number of omissions that our people should try to have corrected at our future exhibitions.

4. Another essential of a good country is good morals. You may think it is within my province to treat this point from a religious aspect only. I am accustomed in my pulpit to treat it from a business viewpoint as well. Do good morals make better citizens, more wealth, greater prosperity, and in general add to the attractions and goaheaditiveness of a community? Is it to its advantage that virtue should be stimulated and vice discour-

aged? Is it for its gain to have justice dealt out with an even hand, and crime properly punished? Is there any profit in keeping the vicious at the rear and at the foot rather than at the front and at the top? Are plenty of churches and well kept Sabbaths a gain or a damage? I think you will agree with me that all such queries must be answered in favor of good morals, justice, order, and religion, and that from a commercial standpoint, even if we go no higher. Some of you have often told me this. Some of you send your children to Sabbath school with a view of making them morally stronger for the business battles in store for them. Our good repute for morality, etc., attracts the best classes to us, and correspondingly repels the vicious. Churches and Sabbath schools are the most efficient police regulations, first class recommendations, and strong factors in building up and developing the material prosperity of any community. Dr. Strong in his marvelous book, "Our Country," which you can get for 25 cents at any of our book stores, and which is well worth your perusal, tells of two adjoining townships on the Western Reserve in Ohio, which, in their original settlement, presented the contrast of Christianity and its most rigid exclusion. A Christian founded the one and an infidel the other, and each did his best to impress his ideas on his settlement. Each succeeded to a remarkable degree. The one township was settled with Christians. A church was organized under the roof of the first log cabin. The school house and the public library soon followed. An academy was soon planted. Several benevolent societies were organized, and here was opened the first school for the deaf and dumb in the State of Ohio. The other township from the very beginning barred out the church. It does so to this day, being still without a church organization. Though within five miles of one of the best colleges in the West, no young man from it has ever taken a college course. But few have entered professional life, and none of them have gained a wide reputation. The other township is widely known to-day for its moral and religious character, its wealth and liberality, and for the exceptionally large number of young men and women it sends to colleges and seminaries. Though it has a poorer soil than its neighbor, its assessed valuation of real and personal property exceeds it by 56 per cent. It has furnished many members of the State Legislature and Senate. It has been fruitful of ministers and educators, some of whom have gained a national reputation. It has furnished college professors, members of the Supreme Bench of the State, and of the United States Congress. This is only one of many examples that might be given, all going to prove that the moral and religious tone of any community is a most important factor in promoting its general welfare. At present, when we are so desirous to attract the best classes of people from all quarters to settle among us, we must not forget that morality, good order, justice, decency, etc., at the front and on top, are prime essentials of success. Their opposites are sure to discount us in the race for success.

5. Another essential of a good country is a spirit of public improvement. The time has come when the "Sleepy Hollow" community, as well as the "Sleepy Hollow" citizen, is sure to get left. An unkempt town, with poor street improvements, or none at all, without waterworks, gas works, electric lights, fire engines, and other necessities of modern civilization, is a modern abomination. Mud roads in winter, dust roads in summer, and bridgeless streams are a sad discount on a country at the present time. Let me congratulate you, fellow citizens of this district, that we are grandly redeeming ourselves from all reproach in this respect. It is a real pleasure to me to have a "prior resident"—not of the Mongolian type—return and note the improvements that are in progress on every hand. Let us

cherish this spirit, assured that in every particular it will work out prosperity for us. Unless we are observant and attentive we have no idea of how much value even little things are in this respect. Let me give you one of the straws to show you which way the wind blows. Not long since a very intelligent, and an experienced and successful teacher from a neighboring county, passed through our town, and naturally took a particular look at our school buildings. They showed broken fences, no trees, and generally cheerless surroundings in so far as the school premises were concerned. The idea followed from this to the stranger mind that the schools must be of the same order. The school exhibits were examined in San Francisco to sustain this idea. They showed to the entire satisfaction of the visitor that the schools were incomparably superior to the indications of their cheerless premises. I say I simply give this as a straw. But such straws are valuable, not for straw beds, but for hints to excite us to see ourselves as others see us, and dress ourselves so that others shall be attracted rather than repelled.

In conclusion, I regard the present as a crisis period in the history of our county. We have waited long and patiently for its improvement and settlement according to the just deserts of its superior natural resources and attractions. We have been passing through a period of patient experiments, and are ready for better things. The near completion of our railroad, by which we will be placed on one of the great transcontinental lines of travel and traffic, will, in my judgment, bring with it changes of which many are not dreaming. I am confident that we have scarcely begun the development of our natural resources. We are largely ignorant of their capabilities. It is this thought—my personal interest in this section as the home and the field of labor to which God most plainly called me, and in which I hope to end my days, and my thorough interest in all that concerns the real welfare of this community—that has prompted what I have said to you this evening. If in anything I have erred I trust you will forgive. If I have been able to give any thought that will stimulate to higher and better things, which is our only good reason for living, I am more than repaid. Thanking you for your kind attention, and sorry I could not have served you better, I am, most respectfully, your obedient servant.

PREMIUMS AWARDED—1888.

LIVE STOCK DEPARTMENT.

Name of Animal.	Exhibitor.	Address.	Award.
THOROUGHBREDS—STALLIONS.			
Ironclad, three years old or over	Charles Cockerill..	Soledad	\$10 00
Chongo, one year old	Charles Cockerill..	Soledad	\$5 00
MARES.			
Daisy D, three years old or over	Charles Cockerill..	Soledad	\$8 00
FAMILIES.			
Mambrino, Jr. and five colts.	J. D. Carr	Salinas City	\$15 00
Lady Jones and four colts.	J. B. Iverson	Salinas City	\$10 00
ROADSTERS—STALLIONS OR GELDINGS.			
Manzanita, four years old or over	J. D. Carr	Salinas City	\$10 00
Lawyer Nutwood, three years old	P. McCartney	Salinas City	\$8 00
Crescent, two years old	Ira Rose	Salinas City	\$5 00
MARES.			
Flora G, three years old or over	A. Sweeten	Salinas City	\$7 50
Lady St. Clair, two years old	P. M. Jacks	Salinas City	\$5 00
HORSES FOR ALL PURPOSES—STALLIONS.			
Nonpareil, four years old or over	James Storm	Salinas City	\$15 00
Glenwood, three years old	J. R. Hebbroon	Salinas City	\$10 00
Thurman, one year old	J. D. Carr	Salinas City	\$5 00
Pride, suckling colt	L. Callahan	Salinas City	\$3 00
GELDING.			
Combination	J. B. Iverson	Salinas City	\$10 00
MARES.			
Maud, four years old or over	P. Kilburn	Salinas City	\$10 00
Ina, three years old	H. Corey	Salinas City	\$7 50
Rose, one year old	P. Kilburn	Salinas City	\$2 50
Rosedale, four years old, with colt	H. Corey	Salinas City	\$10 00
DRAFT HORSES—STANDARD—STALLIONS.			
Paradise, four years old or over	James Storm	Salinas City	\$15 00
Colonel Lamar, two years old	M. Barry	Castroville	\$7 50
John, suckling colt	M. Lynn	Salinas City	\$2 50
DRAFT HORSES—GRADED.			
John L, four years old or over	M. C. Collins	Gonzales	\$10 00
Nellie, three years old	James Storm	Salinas City	\$6 00
Maggie, suckling colt	P. Kilburn	Salinas City	\$2 50
CARRIAGE HORSES.			
Ben and Levi, span of carriage horses	H. S. Ball	Salinas City	\$10 00
Jim and Jessie, span of buggy horses	James Storm	Salinas City	\$7 50
SWEEPSTAKES.			
Clarence King, stallion with four or more colts	H. Corey	Salinas City	\$20 00
Revere, stallion with four or more colts	James Storm	Salinas City .....	.....
Rosie, mare with four or more colts	H. Corey	Salinas City	\$20 00
Salinas Belle, mare with four or more colts	J. B. Iverson	Salinas City .....	.....
Nonpareil, stallion of any breed or age	James Storm	Salinas City	\$15 00
Glenwood, stallion of any breed or age	J. R. Hebbroon	Salinas City	\$7 50
Maud, mare of any breed or age	P. Kilburn	Salinas City	\$15 00

LIVE STOCK DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
Lady Jones, mare of any breed or age.....	J. B. Iverson	Salinas City	\$10 00
Combination, gelding of any breed or age.....	J. B. Iverson	Salinas City	\$10 00
Auntly Wilkes, colt of any breed foaled in 1888	P. Kilburn	Salinas City	\$5 00
CATTLE—DURHAM—BULLS.			
Gladstone, four years old or over	M. Williams	Salinas City	\$10 00
Prince Albert, four years old or over	H. Corey	Salinas City	\$5 00
Nick, two years old	John Sexton	Salinas City	\$3 75
Parnell, one year old	M. Lynn	Salinas City	\$7 50
37th of Forest Home, one year old	M. Lynn	Salinas City	\$5 00
Maxwell Chief, calf	J. B. Smith	Salinas City	\$5 00
Grover Cleveland, calf	M. Williams	Salinas City	\$3 00
COWS.			
Forest Rose 8th, four years old or over	M. Lynn	Salinas City	\$10 00
Lorena, four years old or over	J. B. Smith	Salinas City	\$5 00
Nora 10th, three years old	M. Williams	Salinas City	\$7 50
Flora 7th, three years old	M. Williams	Salinas City	\$5 00
16th Duchess of Gloster, two years old	P. Kilburn	Salinas City	\$7 50
Flora 8th, two years old	M. Lynn	Salinas City	\$5 00
Rosie, one year old	P. Kilburn	Salinas City	\$5 00
Forest Rose 11th, one year old	John Sexton	Salinas City	\$3 00
Lady Parnell, heifer calf	M. Lynn	Salinas City	\$5 00
Lady Ellen, heifer calf	M. Williams	Salinas City	\$3 00
GRADED CATTLE.			
Scotty, cow, three years old or over	James Storm	Salinas City	\$10 00
Young Nick, bull calf	James Storm	Salinas City	\$5 00
Best herd of cattle, one male and four females	M. Williams	Salinas City	\$15 00
Second best herd of cattle, one male and four females	M. Lynn	Salinas City	\$10 00
SWINE.			
Bismarck, boar	D. McKinnon	Salinas City	\$5 00
Lady Ellen, sow	Z. B. Smith	Salinas City	\$5 00
POULTRY.			
Pair of Black Spanish	Ira Rose	Salinas City	\$1 00
Pair of White Leghorns	Ira Rose	Salinas City	\$1 00
Pair of Brown Leghorns	Ira Rose	Salinas City	\$1 00
Pair of Irish Game	S. Matthews	Salinas City	\$1 00
Pair of Diamond Game	S. Matthews	Salinas City	\$1 00
Pair of Langshans	Ira Rose	Salinas City	\$1 00
Pair of Game Bantams	W. R. Ellis	Salinas City	\$1 00

MISCELLANEOUS DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
Harrow	Z. N. Lacey	Salinas City	\$5 00
Sulky harrow	Z. N. Lacey	Salinas City	\$5 00
Two-seated spring wagon	Iverson Bros.	Salinas City	\$5 00
Blacksmith work	E. Maguire	Salinas City	\$5 00
Harness and saddlery work	M. Hughes	Salinas City	\$7 50
Set of team harness	M. Hughes	Salinas City	\$5 00
Buggy harness (single)	M. Hughes	Salinas City	\$5 00
Buggy harness (double)	M. Hughes	Salinas City	\$5 00
Lady's saddle	M. Hughes	Salinas City	\$3 00
Gentleman's saddle	M. Hughes	Salinas City	\$3 00
Rag carpet	Mrs. C. Hoffman ..	Salinas City	\$2 00
Set of parlor furniture	Francee & Burkman ..	Salinas City	\$10 00
Second best set of parlor furniture	Francee & Burkman ..	Salinas City	\$5 00

MISCELLANEOUS DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Set of chamber furniture	Francee & Burkman	Salinas City	\$5 00
Spring mattresses	Francee & Burkman	Salinas City	\$3 00
Spring beds	Francee & Burkman	Salinas City	\$3 00
Upholstery	Francee & Burkman	Salinas City	\$5 00
General display of furniture	Francee & Burkman	Salinas City	\$20 00
Sack of wheat	S. O. Pugh	Gonzales	\$3 00
Sack of barley	W. Parsons	Gonzales	\$2 00
Sack of rye	J. B. Hickman	Cameron	\$2 00
Sack of corn	J. B. Hickman	Cameron	\$2 00
Exhibit of flaxseed	J. B. Hickman	Cameron	\$2 00
Exhibit of flax	J. B. Hickman	Cameron	\$2 00
Exhibit of corn	Thos. Watson	Corral de Tierra	\$2 00
Exhibit of ham	R. N. Windsor	Gonzales	\$2 00
Exhibit of bacon	R. N. Windsor	Gonzales	\$2 00
Exhibit of honey in comb	Ira Rose	Salinas City	\$2 00
Exhibit of two pounds of strained honey	J. B. Hickman	Cameron	\$2 00
Collection of garden seeds	J. B. Hickman	Cameron	\$5 00
Collection of garden products	J. B. Hickman	Cameron	\$5 00
Sack of dried beans	J. B. Hickman	Cameron	\$2 00
Melons	S. O. Pugh	Gonzales	\$1 00
Squashes	J. B. Hickman	Cameron	\$1 00
Twenty pounds of tomatoes	J. B. Hickman	Cameron	\$1 00
Sugar beets	Thos. Watson	Corral de Tierra	\$1 00
Peanuts	S. O. Pugh	Gonzales	\$1 00
General display of fruits	S. O. Pugh	Gonzales	\$10 00
Twelve varieties of apples	R. N. Windsor	Gonzales	\$5 00
Collection of pears	R. N. Windsor	Gonzales	\$5 00
Collection of peaches	Thos. Watson	Corral de Tierra	\$3 50
Collection of plums	R. N. Windsor	Gonzales	\$3 50
Collection of foreign grapes	S. O. Pugh	Gonzales	\$3 50
Collection of wine grapes	S. O. Pugh	Gonzales	\$3 50
Collection of nuts	Thos. Watson	Corral de Tierra	\$3 50
Exhibit of domestic canned fruit	Mrs. J. B. Hickman	Cameron	\$5 00
Exhibit of fruit sealed in glass	Mrs. W. L. Carpenter	Salinas City	\$5 00
Exhibit of sweet pickles	Mrs. J. B. Bennett	Salinas City	\$2 00
Exhibit of preserves	Mrs. W. L. Carpenter	Salinas City	\$2 50
Exhibit of jellies	Mrs. L. H. Garrigus	Salinas City	\$2 50
Exhibit of domestic dried fruit	Thos. Flint	San Juan	\$3 00
Exhibit of dried prunes and plums	Thos. Flint	San Juan	\$2 00
Exhibit of dried apples	Thos. Flint	San Juan	\$2 00
Exhibit of dried pears	Thos. Flint	San Juan	\$2 00
Exhibit of dried apricots	Thos. Flint	San Juan	\$2 00
Exhibit of dried peaches	Thos. Flint	San Juan	\$2 00
Collection of flowers in bloom	Mrs. S. Dixon	Salinas City	\$5 00
Collection of foliage plants	Mrs. S. Dixon	Salinas City	\$5 00
Display of cut flowers	J. B. Hickman	Cameron	\$2 50
Collection of new and rare plants	Mrs. S. Dixon	Salinas City	\$2 50
Collection of fuchsias in bloom	Mrs. S. Dixon	Salinas City	\$1 00
Collection of dahlias	Mrs. S. Dixon	Salinas City	\$2 00
Collection of roses in bloom	Mrs. S. Dixon	Salinas City	\$2 00
Collection of tuberose	Mrs. P. Zaballa	Salinas City	\$1 00
Collection of pinks	Percy Hickman	Cameron	\$1 00
Collection of ferns	Mrs. P. Zaballa	Salinas City	\$1 00
Exhibit of wines and liquors	M. Cartier	Salinas City	\$10 00
Exhibit of mineral specimens	J. B. Hickman	Cameron	\$5 00
Exhibit of shells	Mrs. P. Zaballa	Salinas City	\$2 50
Exhibit of flour	Central Milling Co.	Salinas City	\$5 00
Exhibit of cheese	E. Rossi	Salinas City	\$5 00
Exhibit of butter	Chas. Reynolds	Salinas City	\$5 00
Exhibit of pastry	Pearl Birlem	Salinas City	\$1 00
Exhibit of three kinds of cake	Mrs. L. H. Garrigus	Salinas City	\$1 00
Exhibit of home-made bread	Pearl Birlem	Salinas City	\$4 00
Second best	Lena Morehouse	Salinas City	\$2 00
Cambric embroidery	Mrs. P. Kilburn	Salinas City	\$1 50

MISCELLANEOUS DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Article in crewel	Miss R. Littlefield.	Salinas City	\$1 50
Article in filoselle	Mrs. J. B. Bennett.	Salinas City	\$2 00
Article embroidered on plush	Mrs. H. S. Ball	Salinas City	\$2 00
Tapestry embroidery	Sophia Brown	Salinas City	\$2 00
Applique embroidery	Mrs. P. Kilburn	Salinas City	\$2 00
Outline embroidery	Mrs. J. Martin	San Ardo	\$1 50
Article chenille	Mrs. J. B. Bennett.	Salinas City	\$2 50
Raised silk work	Mrs. J. B. Bennett.	Salinas City	\$2 50
Embroidered piano cover	Mrs. H. S. Ball	Salinas City	\$4 00
Embroidered table scarf	Mrs. M. Lynn	Salinas City	\$2 00
Embroidered table lambrequin	Miss E. Littlefield.	Salinas City	\$2 00
Embroidered sofa pillow	Miss E. Littlefield.	Salinas City	\$2 00
Embroidered wall panel	Mrs. H. S. Ball	Salinas City	\$1 50
Embroidered ottoman	C. L. Simpson	Salinas City	\$1 50
Article of braiding	Mrs. J. B. Smith	Salinas City	\$1 50
Couching embroidery	Mrs. H. S. Ball	Salinas City	\$1 50
Fine lace work	Miss E. Littlefield.	Salinas City	\$2 00
Modern point lace	Mrs. S. Lean	Salinas City	\$3 00
Article of Spanish work	Mrs. P. Leballa	Salinas City	\$3 00
Darned tulle	Miss E. Littlefield.	Salinas City	\$1 50
Bead work	Mrs. J. B. Bennett.	Salinas City	\$1 50
Crazy bedquilt	Mrs. J. B. Bennett.	Salinas City	\$2 00
Silk patchwork bedquilt	Mrs. H. Corey	Salinas City	\$2 00
Cotton patchwork bedquilt	Mrs. L. H. Garrigus.	Salinas City	\$2 00
Crochet bedquilt	Mrs. J. Martin	San Ardo	\$2 00
Wax work	Mrs. J. P. Birlem	Salinas City	\$1 00
Feather work	Miss E. Littlefield.	Salinas City	\$1 50
Paper flowers	Mrs. P. Kilburn	Salinas City	\$1 50
Dried grasses and flowers	Mrs. J. B. Hickman	Salinas City	\$1 00
Crochet cotton tidy	Mrs. J. B. Bennett.	Salinas City	\$1 00
Crochet worsted tidy	Mrs. J. B. Smith	Salinas City	\$1 00
Macreme work	Mrs. J. B. Bennett.	Salinas City	\$1 00
Lambrequin in seine twine	Mrs. L. H. Garrigus.	Salinas City	\$1 00
Buggy afghan	Bertha Wilcoxon	Salinas City	\$1 50
Embroidered tidy	Mrs. J. B. Bennett.	Salinas City	\$1 00
Plain hemstitching	Mrs. H. S. Ball	Salinas City	\$1 00
Painted table scarf	Mrs. V. Black	Salinas City	\$1 00
Sign painting	Francee & Burkman	Salinas City	\$5 00
Carriage painting	J. P. Thomson	Salinas City	\$5 00
Design of dairy-house	J. B. Hickman	Salinas City	\$2 50
Design of granary	J. B. Hickman	Salinas City	\$2 50
Original oil painting	Mrs. H. S. Ball	Salinas City	\$2 50
Original oil painting from nature	Mrs. J. B. Short	Salinas City	\$2 50
Copy of oil painting	Mrs. H. S. Ball	Salinas City	\$2 00
Original crayon drawing	Mrs. J. B. Short	Salinas City	\$2 00
Copy of original crayon drawing	Mrs. J. B. Short	Salinas City	\$2 00
Original pencil drawing	Mrs. J. B. Short	Salinas City	\$2 00
Kensington drawing	Mrs. V. Black	Salinas City	\$2 00
Oil painting in flowers	Mrs. H. S. Ball	Salinas City	\$2 00
Hand-painted china	Mrs. L. H. Garrigus.	Salinas City	\$2 00
Specimen of penmanship	Pearl Birlem	Salinas City	\$3 00
Exhibit of silverware	Mrs. J. P. Birlem	Salinas City	\$5 00
Exhibit of cutlery	E. K. Abbott	Salinas City	\$2 50
Exhibit of photography	J. Ed. Bacon	Salinas City	\$20 00

SPEED PROGRAMME.

TUESDAY, OCTOBER 2, 1888.

RACE No. 1—TROTTING.

Two-year-old Colt Stake for 1888. Fifty dollars stake; one hundred dollars added by Association.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Robert Lee, by Kingston	Wm. Vanderhurst	Salinas City.
Bay Clem, by Starr King	C. C. Allen	Salinas City.
Sorrel Charley, by Kingston	Charles Luse	Salinas City.
Daisy R, by Irwin Davis	H. P. Brown	Salinas City.

SUMMARY.

Bay Clem	1
Robert Lee	2
Daisy R	3
Sorrel Charley	4

Time—3:00; 2:52.

RACE No. 2—RUNNING.

For all horses owned in the district. Purse, one hundred and fifty dollars. Three-quarter mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Katie C, by Kingston	Cavanagh Bros.	Chualar.
Lady R, by Wildidle	P. Collins	Gonzales.
Daisy D, by Wheatly	R. B. Cockerill	Salinas City.
Roundout, by Kingston	M. P. Kelly	Gonzales.

SUMMARY.

Daisy D	1
Lady R	2
Roundout	3
Katie C	4

Time—1:19; 1:21.

RACE No. 3—TROTTING.

Special. For named horses. Purse, one hundred dollars. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Charley V, by Carr's Mambrino	Wm. Vanderhurst	Salinas City.
Billy Baxter, by Tom Vernon	M. J. Smeltzer	Salinas City.
Fred Grant, by General Grant	R. S. R. Clayton	Priest Valley.

SUMMARY.

Billy Baxter.....	1
Charley V.....	2
Fred Grant.....	3

Time—2:43 $\frac{3}{4}$; 2:44 $\frac{3}{4}$; 2:43; 2:45; 2:44 $\frac{1}{2}$; 2:41.

WEDNESDAY, OCTOBER 3, 1888.

RACE No. 4—TROTTING.

For named stallions. Purse, two hundred dollars. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Junio, by Electioneer.....	A. Gonzales.....	San Francisco.
Billy Matthews, by George M. Patchen.....	J. G. Sanchez.....	San Juan.
Jim L, by Dan Voorhees.....	J. A. Linscott.....	Watsonville.

SUMMARY.

Jim L.....	1
Junio.....	2
Billy Matthews.....	3

Time—2:24; 2:24 $\frac{1}{2}$; 2:25; 2:26; 2:27.

RACE No. 5—RUNNING.

For all two-year olds in the district. Purse, one hundred dollars. One half-mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Essie C.....	J. Bardin.....	Salinas City.
Pirate.....	R. V. Cavanagh.....	Chualar.

SUMMARY.

Pirate.....	1
Essie C.....	2

Time—0:52.

THURSDAY, OCTOBER 4, 1888.

RACE No. 6—TROTTING.

For all two-year olds in the district. Pure, one hundred and fifty dollars. Mile heats; two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Daisy R, by Irwin Davis.....	H. P. Brown.....	Salinas City.
Robert Lee, by Kingston.....	Wm. Vanderhurst.....	Salinas City.
Bertha, by Carr's Mambrino.....	J. D. Carr.....	Salinas City.
Lady St. Clair, by Irwin Davis.....	P. M. Jacks.....	Salinas City.
Joe, by Junio.....	A. Gonzales.....	Salinas City.

SUMMARY.

Joe.....	1
Robert Lee.....	2
Bertha.....	3
Daisy R.....	4

Time—3:13; 3:03; 3:06.

RACE No. 7—RUNNING.

Special. For named horses. Purse, one hundred and fifty dollars. Five-eighth mile heats; best two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Charley Luce, by Kingston	Jas. Dwain	Salinas City.
Billy M, by Orphan Boy	E. J. Mann	Watsonville.
Dashaway, by Wildidle	Thos. Hoadley	Soledad.
Roundout, by Kingston	M. P. Kelly	Gonzales.
Katie C, by Kingston	Cavanagh Bros.	Chualar.

SUMMARY.

Katie C	1
Dashaway	2
Roundout	3
Charley Luce	4

Time—1:06; 1:06; 1:06½.

RACE No. 8—TROTTING.

Free for all. Purse, two hundred and fifty dollars. Two-mile heats; best two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Rosewald, by A. W. Richmond	H. Delaney	Santa Barbara.
Flora G, by Altoona	T. McCartney	Salinas City.
Field Grover, by Index	J. Dwain	Salinas City.
Manzanita, by Elmo	J. McIntyre	Salinas City.

SUMMARY.

Flora G	1
Rosewald	2
Manzanita	3
Field Grover	4

Time—5:11; 5:09; 5:14; 5:05¾.

FRIDAY, OCTOBER 5, 1888.

RACE No. 9—TROTTING.

Special, for named horses. Purse, one hundred and fifty dollars. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Sorrel Jimmy, by Benton.....	Bullene Bros.	Salinas City.
Jim, sire unknown.....	A. C. Wood.....	Watsonville.
Lady Lightfoot, sire unknown.....	W. J. Lynn.....	Salinas City.
Fred Grant, by General Grant.....	R. S. R. Clayton.....	Priest Valley.

SUMMARY.

Fred Grant.....	1
Sorrel Jimmy.....	2
Lady Lightfoot.....	3
Jim.....	4

Time—2:47; 2:48; 2:49½; 2:46½; 2:46.

RACE No. 10—RUNNING.

For named horses. Purse, one hundred dollars. Half-mile heats; two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Johnnie I, by Oliver Cromwell.....	A. Innes.....	Santa Cruz.
Lady R, by Wildidle.....	P. Collins.....	Gonzales.
Nerva, sire unknown.....	Al. Farrow.....	San José.

SUMMARY.

Nerva.....	1
Johnnie I.....	2
Lady R.....	3

Time—0:49½; 0:49¾.

SATURDAY, OCTOBER 6, 1888.

RACE No. 11—RUNNING.

Novelty running race. Purse, one hundred and fifty dollars. One and one quarter miles dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Humboldt Joe, sire unknown.....	Marquehasse Bros.	Lone Oak.
Lady R, by Wildidle.....	P. Collins.....	Gonzales.
Johnnie I, by Oliver Cromwell.....	A. Innes.....	Santa Cruz.
Midnight, sire unknown.....	W. Jeter.....	Santa Cruz.

SUMMARY.

Lady R.....	1
Johnnie I.....	2
Humboldt Joe.....	3

Time—2:25.

RACE No. 12—TROTTING.

Free for all. Purse, two hundred and fifty dollars. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Flora G, by Altoona	E. Graves	San Luis Obispo.
Field Grover, by Index	J. Dwain	Salinas City.
Maud H, by Carr's Mambrino	J. H. Harris	Salinas City.
Billy Matthews, by George M. Patchen	J. G. Sanchez	San Juan.
Rosewald, by A. W. Richmond	H. Delaney	Santa Barbara.

SUMMARY.

Flora G	1
Rosewald	2
Maud H	3
Field Grover	4

Time—2:36½; 2:34; 2:35½; 2:37; 2:35½; 2:36¼.

TRANSACTIONS

OF THE

EIGHTH DISTRICT AGRICULTURAL ASSOCIATION

For the Year 1888,

Composed of the County of El Dorado.

OFFICERS OF THE ASSOCIATION.

THOMAS FRASER.....	President.
W. H. H. FELLOWS.....	Secretary.
JAMES BLAIR.....	Treasurer.

DIRECTORS.

THOMAS FRASER.....	Placerville, El Dorado County.
E. A. BOLES.....	Placerville, El Dorado County.
J. C. MARSH.....	Placerville, El Dorado County.
R. ALDERSON, JR.....	Placerville, El Dorado County.
SHELLEY INCH.....	Placerville, El Dorado County.
J. P. ALLEN.....	Placerville, El Dorado County.
ALBERT NORRIS.....	Pleasant Valley, El Dorado County.
A. T. LEACHMAN.....	Salmon Falls, El Dorado County.

REPORT.

PLACERVILLE, November 10, 1888.

To the honorable the State Board of Agriculture:

GENTLEMEN: The Directors of the Eighth District Agricultural Association submit this, their report of the transactions of said association, for the year ending this date.

W. H. H. FELLOWS, Secretary.

RECEIPTS AND EXPENDITURES.

Receipts.

From donations and privileges	\$928 10	
Pavilion receipts (tickets)	485 25	
Park receipts (tickets)	305 75	
Race entries	302 50	
Hack badges, etc.	47 50	
Ball, mill, and Shelley Inch	74 75	
Money advanced by Thomas Fraser and James Blair, to pay premiums	1,200 00	
		<u>\$3,343 85</u>

Expenditures.

Printing	\$193 40	
Stationery, expressage, and postage	23 30	
Labor, merchandise, and water for park	291 06	
Salaries	348 20	
Music, hauling, etc.	196 49	
Rent of Sigwartz's Hall	125 00	
C. Crippin, hauling (pavilion)	3 34	
Race money refunded	78 00	
Race purses paid, from No. 1 to No. 8, inclusive	1,115 00	
Special saddle race	25 00	
Monitor Baseball Club	50 00	
O'Donnell Baseball Club	50 00	
Taxes and interest	57 46	
Premiums paid	787 60	
		<u>\$3,343 85</u>

PREMIUMS AWARDED—1888.

FIRST DEPARTMENT.

Name of Animal.	Exhibitor.	Address.	Award.
CLASS I.			
Stallion, one year old	Martin Minster	Pleasant Valley	---\$4 00
Stallion, three years old	J. J. Miller	Placerville	---\$8 00
CLASS IV.			
Horses of all work	J. A. Blakely	Placerville	---\$4 00
Horses of all work	A. Joy	Placerville	---\$8 00
CLASS VI.			
Saddle horse	G. A. Blakely	Placerville	---\$2 00
CLASS VII.			
Mare, three years old	T. Carter	Placerville	---\$6 00
CLASS X.			
Jersey bull, three years old	Carter & Clark	Placerville	---\$12 00
Durham bull, three years old	G. A. Blakely	Placerville	---\$12 00
Bull calf, one year old	John Askew	El Dorado	---\$4 00
Bull calf, under one year old	James Askew	El Dorado	---\$2 00
Jersey cow	John Askew	El Dorado	---\$8 00
Jersey heifer, one year old	John Askew	El Dorado	---\$4 00
Jersey heifer, under one year old	James Askew	El Dorado	---\$2 00
Cow, three years old	James Askew	El Dorado	---\$12 00
Bull, under one year old	James Askew	El Dorado	---\$2 00
CLASS XI.			
Jersey bull and family	James Askew	El Dorado	---\$12 00
CLASS XII.			
Susie, cow	D. Clark	Placerville	---\$6 00
Dolly, cow	James Askew	El Dorado	---\$8 00
CLASS XIII.			
Ram	J. Askew	El Dorado	---\$8 00
O. D. ram	J. Askew	El Dorado	---\$4 00
Pair of ewes	J. Askew	El Dorado	---\$6 00
CLASS XVI.			
Plymouth Rocks	T. Clifton	Placerville	---\$2 00
White Leghorns	T. Clifton	Placerville	---\$2 00
Game chickens	T. Clifton	Placerville	---\$1 60
Black Spanish	T. Clifton	Placerville	---\$1 60
White Crested ducks	T. Clifton	Placerville	---\$1 60
Bremen geese	T. Clifton	Placerville	---\$1 60
Best and largest collection of poultry	T. Clifton	Placerville	---\$5 00
Partridge Cochins	N. J. McCumsey	Placerville	---\$1 60
Toulouse geese	N. J. McCumsey	Placerville	---\$1 60
Black Leghorns	J. Askew	El Dorado	---\$1 60
Brown Leghorns	J. Askew	El Dorado	---\$2 00
Game Bantams	Carl Crippin	Placerville	---\$2 00

SECOND DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Best display of machinery.....	H. S. Morey.....	Placerville.....	\$5 00
CLASS II.			
Windmill.....	Weatherwax & Morey.....	Placerville.....	Diploma.
CLASS III.			
Best two-horse wagon.....	N. Wonderley.....	Placerville.....	\$8 00
Best two-horse wagon.....	N. Wonderley.....	Placerville.....	\$8 00

THIRD DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS II.			
Best hand-made horseshoe.....	John Martin.....	Placerville.....	Dip. & \$4
Best dynamo electric machine.....	J. C. Bartlett.....	Placerville.....	Dip.
Best cook stove.....	Weatherwax & Morey.....	Placerville.....	and \$2 50 Diploma.
Best kitchen ware.....	Weatherwax & Morey.....	Placerville.....	\$3 00
CLASS IV.			
Best roof slate and work.....	C. P. H. Buck.....	Placerville.....	\$5 00
Best soft soap.....	Wm. Hendrix.....	Placerville.....	\$2 00
Best slate roofing.....	G. J. Mothersole.....	Placerville.....	Dip. & \$2
CLASS V.			
Best exhibit millinery.....	Mrs. I. B. Thomas.....	Placerville.....	Dip.
Best exhibit silver and queensware.....	Weatherwax & Morey.....	Placerville.....	and \$7 50 Dip.
Best exhibit table cutlery.....	Weatherwax & Morey.....	Placerville.....	and \$2 50 .....\$2 50
Best exhibit tools and hardware.....	Weatherwax & Morey.....	Placerville.....	\$5 00

FOURTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Best twenty-five pounds rye.....	G. L. Blakeley.....	Placerville.....	\$3 00
Best twenty-five pounds barley.....	G. L. Blakeley.....	Placerville.....	\$4 00
Best twenty-five pounds oats.....	C. H. McCuen, Jr.....	Placerville.....	\$3 00
Best twenty-five pounds corn.....	C. H. McCuen, Jr.....	Placerville.....	\$3 00
Best twenty-five pounds flax.....	C. H. McCuen, Jr.....	Placerville.....	\$2 50
Best twenty-five pounds hemp.....	C. H. McCuen, Jr.....	Placerville.....	\$2 50
Second best oats.....	J. Askew.....	El Dorado.....	\$1 50
Best twenty-five pounds wheat.....	P. Kramp.....	Diamond Spr'gs.....	\$4 00
Best flour.....	Chas. Sibeck.....	Placerville.....	\$4 80
Second best wheat.....	C. H. McCuen, Jr.....	Placerville.....	\$2 00
CLASS II.			
Second best onions.....	Peter Wilkerson.....	Placerville.....	\$1 50
Best Indian corn on stalk.....	C. H. McCuen, Jr.....	Placerville.....	\$3 00
Best broom corn on stalk.....	C. H. McCuen, Jr.....	Placerville.....	\$2 00
Best pop corn on stalk.....	C. H. McCuen, Jr.....	Placerville.....	\$2 00
Best potatoes.....	C. H. McCuen, Jr.....	Placerville.....	\$4 00
Best parsnips.....	C. H. McCuen, Jr.....	Placerville.....	\$1 50
Largest squash.....	C. H. McCuen, Jr.....	Placerville.....	\$1 50
Best twenty-five pounds Bayo beans.....	C. H. McCuen, Jr.....	Placerville.....	\$1 50

FOURTH DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Second best exhibit garden seeds	C. H. McCuen, Jr.	Placerville	\$2 50
Best exhibit sweet corn on stalk	A. S. Cook	Placerville	\$3 00
Best exhibit garden seeds	J. Askew	El Dorado	\$5 00
Best exhibit potatoes	George Van Vleck	El Dorado	\$6 00
Best exhibit stock beets	George Van Vleck	El Dorado	\$1 50
Best exhibit stock carrots	George Van Vleck	El Dorado	\$1 50
Best exhibit cabbage	J. P. Allen	Placerville	\$3 00
Largest cabbage	J. P. Allen	Placerville	\$1 50
Third best display potatoes	P. Kramp	Diamond Spr'gs.	\$2 50
Best onions	P. Kramp	Diamond Spr'gs.	\$3 00
Best cucumbers	J. C. Marsh	Placerville	\$1 50
Best peppers	J. C. Marsh	Placerville	\$1 00
Best table beets	P. Kramp	Diamond Spr'gs.	\$1 50
Best watermelons	J. Lyon	Placerville	\$2 50
Largest watermelon	J. Lyon	Placerville	\$1 00
Best white beans	J. Lyon	Placerville	\$1 50
Best exhibit of squash	J. Lyon	Placerville	\$1 50
Best sweet potatoes	J. Lyon	Placerville	\$2 50
Best tomatoes	J. Lyon	Placerville	\$3 00
Best three muskmelons	P. Kramp	Diamond Spr'gs.	\$1 50
Best exhibit of garden vegetables	J. Lyon	Placerville	\$5 00
CLASS III.			
Sunflowers	Peter Wilkerson	Placerville	\$1 00
Ferns	Miss J. J. Crawford	Placerville	\$2 00
Flowering plants in bloom	Miss Annie Tindall	Placerville	\$6 00
Cut flowers	Miss Annie Tindall	Placerville	\$1 60
Bouquet of cut flowers	Miss Annie Tindall	Placerville	\$1 60
Handsome floral design	Miss Annie Tindall	Placerville	\$2 40
Ornamental grasses	Mrs. J. J. Crawford	Placerville	\$2 00
Third best flowering plants in bloom	Mrs. W. H. H. Fel- lows	Placerville	\$3 00
Ornamental foliage plants	Mrs. W. H. H. Fel- lows	Placerville	\$6 00
Second best flowering plants in bloom	John Waters	Placerville	\$4 00
Second best ornamental foliage plants	John Waters	Placerville	\$3 00
Hanging basket plants	John Waters	Placerville	\$2 00
Cut flowers	Mrs. W. H. H. Fel- lows	Placerville	Sp. men.
CLASS IV.			
Second best lard	Wm. Hendrix	Placerville	\$1 50
Best roll of butter	John Askew	El Dorado	\$5 00
Best lard	Mrs. P. Kramp	Diamond Spr'gs.	\$2 00
Second best butter in rolls	Jas. Askew	El Dorado	\$2 50
Best pickled butter	Jas. Askew	El Dorado	\$4 00
CLASS V.			
Best graham bread	Gertie Fraser	Placerville	\$1 50
Best wheat bread	Mrs. A. J. Lowery	Placerville	\$3 00
Second best wheat bread	Mrs. J. Maynard	Placerville	\$1 50
Best biscuits	Mrs. J. Maynard	Placerville	\$1 50
Best rye bread	Mrs. P. Kramp	Diamond Spr'gs.	\$1 50
Best brown bread	Mrs. P. Kramp	Diamond Spr'gs.	\$1 50
Best corn bread	Hattie Gardiner	Placerville	\$1 50
Best and largest variety of bread	Hattie Gardiner	Placerville	\$3 00
Fruit and pound cake	Geo. Hilbert	Placerville	Diploma and \$2 50

FIFTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Second best wine grapes	I. S. Bamber	Placerville	\$4 00
Second best table grapes	I. S. Bamber	Placerville	\$4 00
Third best apples	I. S. Bamber	Placerville	\$4 50
Best pears	I. S. Bamber	Placerville	\$7 50
Third best prunes	I. S. Bamber	Placerville	\$3 00
Best figs	I. S. Bamber	Placerville	\$5 00
Second best apples	S. Weymouth	Placerville	\$6 00
Second best plums	S. Weymouth	Placerville	\$6 00
Second best pears	C. H. McCuen, Jr.	Placerville	\$6 00
Fourth best pears	C. H. McCuen, Jr.	Placerville	\$3 00
Fourth best plums	A. S. Cook	Placerville	\$3 00
Second best figs	A. S. Cook	Placerville	\$3 50
Third best peaches	Wm. Hendrix	Placerville	\$4 50
Fourth best peaches	John Askew	Placerville	\$3 00
Fourth best apples	W. D. Carpenter	Diamond Spr'gs.	\$3 00
Second best peaches	W. D. Carpenter	Diamond Spr'gs.	\$6 00
Best plums	W. D. Carpenter	Diamond Spr'gs.	\$7 50
Second best prunes	P. Kramp	Diamond Spr'gs.	\$4 50
Best wine grapes	P. Kramp	Diamond Spr'gs.	\$5 00
Best table grapes	T. O. Hardie	Placerville	\$5 00
Best general display of grapes	T. O. Hardie	Placerville	\$7 50
Third best pears	Jacob Lyon	Placerville	\$4 50
Second best nectarines	Jacob Lyon	Placerville	\$2 50
Third best plums	S. R. Tripp	Placerville	\$4 50
Best prunes	Thomas Fraser	Placerville	\$7 50
Best apples	J. C. Marsh	Placerville	\$7 50
Best nectarines	J. C. Marsh	Placerville	\$5 00
Best peaches	J. C. Marsh	Placerville	\$7 50
Blackberries	John Waters	Placerville	\$1 00
Raspberries	P. Kramp	Diamond Spr'gs.	\$1 00
CLASS II.			
Second best dried apricots	I. S. Bamber	Placerville	\$1 50
Second best dried pears	I. S. Bamber	Placerville	\$2 00
Best dried apples	I. S. Bamber	Placerville	\$3 00
Best dried plums	I. S. Bamber	Placerville	\$3 00
Best dried figs	I. S. Bamber	Placerville	\$2 50
Best dried berries	I. S. Bamber	Placerville	\$3 00
Second best dried raisins	I. S. Bamber	Placerville	\$4 00
Second best dried peaches	Schmidt Bros.	Placerville	\$2 60
Best American chestnuts	S. Weymouth	Placerville	\$2 00
Second best dried berries	C. H. McCuen, Jr.	Placerville	\$1 50
Best and largest display of dried fruit	C. H. McCuen, Jr.	Placerville	\$6 00
Best dried nectarines	A. S. Cook	Placerville	\$3 00
Second best dried prunes	A. S. Cook	Placerville	\$2 00
Best Italian chestnuts	Wm. Hendrix	Placerville	\$2 00
Best English walnuts	A. Edinger	Placerville	\$2 00
Best soft-shell almonds	A. Koch	Placerville	\$2 00
Best evaporated apples	W. D. Carpenter	Diamond Spr'gs.	\$2 40
Best evaporated apricots	W. D. Carpenter	Diamond Spr'gs.	\$2 40
Best black walnuts	W. D. Carpenter	Diamond Spr'gs.	\$2 00
Best sun-dried plums	W. D. Carpenter	Diamond Spr'gs.	\$3 00
Second best sun-dried figs	W. D. Carpenter	Diamond Spr'gs.	\$1 50
Second best nectarines	W. D. Carpenter	Diamond Spr'gs.	\$1 50
Second best sun-dried apples	W. D. Carpenter	Diamond Spr'gs.	\$2 00
Second best sun-dried pears	W. D. Carpenter	Diamond Spr'gs.	\$2 00
Best sun-dried prunes	W. D. Carpenter	Diamond Spr'gs.	\$3 00
Best exhibit and quality of raisins	T. O. Hardie	Placerville	\$6 00
Best seedless raisins	T. O. Hardie	Placerville	\$4 00
Best dried peaches	C. H. McCuen, Jr.	Placerville	\$3 00
Best dried pears	C. H. McCuen, Jr.	Placerville	\$3 00
Second best dried plums	C. H. McCuen, Jr.	Placerville	\$2 00
Best dried egg plums	C. H. McCuen, Jr.	Placerville	\$3 00
CLASS III.			
Best fruit in glass	Mrs. I. S. Bamber	Placerville	\$4 00
Best preserves	Mrs. I. S. Bamber	Placerville	\$4 00
Best jellies	Mrs. I. S. Bamber	Placerville	\$4 00

TRANSACTIONS OF THE
FIFTH DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Second best pickles	Mrs. John Askew ..	El Dorado	\$2 00
Second best jams	Miss L. Campini ..	Placerville	\$3 00
Second best pickles	Miss L. Campini ..	Placerville	\$3 00
Second best preserves	Miss L. Campini ..	Placerville	\$3 00
Second best fruit in glass	W. D. Carpenter ..	Diamond Spr'gs ..	\$3 00
Second best jellies	Mrs. W. H. H. Fel- lows	Placerville	\$3 00
Second best jams	Mrs. W. H. H. Fel- lows	Placerville	\$4 00
Strained honey	S. L. Watkins	Placerville	\$1 50
Honey in comb	S. L. Watkins	Placerville	\$1 60
Best and largest display of fruit in glass	Mrs. I. S. Bamber ..	Placerville	\$3 50
CLASS IV.			
Claret wines	A. Koch	Placerville	\$3 00
White wines	A. Koch	Placerville	\$3 00
Grape brandy	A. Koch	Placerville	\$4 00
Apple brandy	P. Kramp	Diamond Spr'gs ..	\$3 00
Sweet wine	P. Kramp	Diamond Spr'gs ..	\$3 00
Port wine	P. Kramp	Diamond Spr'gs ..	\$3 00
Sherry wine	P. Kramp	Diamond Spr'gs ..	\$3 00
Champagne	P. Kramp	Diamond Spr'gs ..	\$3 00

SIXTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Best outline apron	Mrs. H. Gardiner ..	Pleasant Valley ..	\$1 60
Best crochet skirt	Mrs. H. Gardiner ..	Pleasant Valley ..	\$3 00
Best crochet sofa pillow	Mrs. H. Gardiner ..	Pleasant Valley ..	\$1 60
Handsome display	Mrs. H. Gardiner ..	Pleasant Valley ..	\$1 60
Best crochet shawl	Mrs. H. Gardiner ..	Pleasant Valley ..	\$3 00
Paper flowers, display	Mrs. H. Gardiner ..	Pleasant Valley ..	\$2 00
Largest and meritorious display	Mrs. H. Gardiner ..	Pleasant Valley ..	\$6 00
Best embroidered handkerchief	Miss Susie Staples ..	Log Town	\$1 50
Best undervest	Mrs. M. E. Laverty ..	Placerville	\$1 20
Best silk stockings	Mrs. M. E. Laverty ..	Placerville	\$1 60
Best embroidered table scarf	Mrs. W. W. Stone ..	Placerville	\$3 50
Best crazy quilt	Miss Mary Hunger ..	Placerville	\$4 00
Best crochet spread	Miss Carrie Hunger ..	Placerville	\$3 50
Best toilet set	Miss Maggie Fraser ..	Placerville	\$2 80
Best crochet tidy	Miss Maggie Fraser ..	Placerville	\$1 50
Best fine lace work	Miss Nina Lezatte ..	Placerville	\$2 50
Best silk embroidery	Mrs. J. J. Crawford ..	Placerville	\$3 20
Best embroidered banner	Mrs. J. J. Crawford ..	Placerville	\$2 80
Best ribbon work	Mrs. J. J. Crawford ..	Placerville	\$2 00
Best applique embroidery	Mrs. J. J. Crawford ..	Placerville	\$2 00
Best chenille embroidery	Mrs. J. J. Crawford ..	Placerville	\$2 00
Handsomest ornamental panels	Mrs. J. J. Crawford ..	Placerville	\$3 50
Best display of kensington work	Mrs. J. J. Crawford ..	Placerville	\$3 50
Handsomest lambrequin	Mrs. W. W. Stone ..	Placerville	\$1 80
Best display of ladies' underwear	Mrs. John Askew ..	Mud Springs	\$4 00
Best patchwork quilt	Mrs. John Kerk	Placerville	\$2 50
Best knit bedspread	Mrs. J. O'Donnell ..	Placerville	\$2 40
Handsomest pillow shams	Mrs. T. O. Hardie ..	Placerville	\$2 40
Best display of infants' clothing	Miss Rena Barlow ..	Placerville	\$3 20
Best home-made dress	Miss Rena Barlow ..	Placerville	\$3 50
.....	Miss Alice Kies	Shasta	Sp. men.
CLASS II—JUVENILE.			
Best braid work	Nanille Turman ..	Placerville	\$2 50
Best crochet lace	Addie Fellows	Placerville	\$2 00
Best silk embroidery	Mattie Williams ..	Placerville	\$2 00

SEVENTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Second best animal, in oil	Miss Susie Staples.	El Dorado	\$3 00
Best animal, in oil	Mrs. Dedman	Placerville	\$5 00
Best collection of oil paintings*	Mrs. Dedman	Placerville	\$4 00
CLASS II—DRAWINGS.			
Best pastel	Miss Susie Staples.	El Dorado	\$2 40
Best crayon drawing	Lulu Weatherwax	Placerville	\$1 60
CLASS III—PAINTINGS FOR ADULTS.			
Best water color paintings	Miss Susie Staples.	El Dorado	\$2 50
Best oil painting (original)	Mrs. Dedman	Placerville	\$4 00
CLASS IV—JUVENILE.			
Best landscape drawing, in crayon	Lulu Weatherwax.	Placerville	\$2 00
Best animal drawing	Lulu Weatherwax.	Placerville	\$2 00
Best animal, in pencil	Lulu Weatherwax.	Placerville	\$1 20
Best landscape, in pencil	Lulu Weatherwax.	Placerville	\$1 20
MISCELLANEOUS.			
Penmanship	Stockton Bus. Col.	Stockton	Diploma.
SPECIAL MENTION—FRUITS AND VEGETABLES.			
Exhibit of fruit	Reed & Watkins ..	Placerville	Diploma.
Peaches and grapes	J. W. Dench	Placerville	Diploma.
Squashes	J. Wentz	El Dorado	Sp. prem. and \$1 50
Vegetables	W. S. Ferguson ..	Grizzly Flat	Sp. men.
Pepper plants	Mrs. J. C. March ..	Placerville	Sp. men.
Vegetables	Reed & Watkins ..	Placerville	Diploma.

* Special mention and diploma.

SPEED PROGRAMME.

TUESDAY, AUGUST 21, 1888.

RACE No. 1—RUNNING.

Free for all. Purse, one hundred and fifty dollars. Entrance, fifteen dollars. Five eighths and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Painkiller, by Joe Hooker	Hi. Barton	Latrobe.
Maggie D, by Tim Douglass	D. Dennison	Sacramento.
Minnie R, unknown	E. Flitner	Ione.

SUMMARY.

Minnie R	1
Painkiller	2
Maggie D	3

Time—1:06½; 1:07.

RACE No. 2—RUNNING.

Purse, one hundred dollars. Entrance, ten dollars. Six hundred yards.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Minnie B, by Leinster	Hi. Barton	Latrobe.
Norton, unknown	E. Flitner	Ione.
Barney G, unknown	U. S. Gregory	Ione.

SUMMARY.

Barney G	1
Norton	2
Minnie B	3

Time—0:34.

WEDNESDAY, AUGUST 22, 1888.

RACE No. 3—RUNNING.

Free for all. Purse, three hundred dollars. Entrance, thirty dollars. Three quarters of a mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Minnie B, by Leinster	Hi. Barton	Latrobe.
Blue Bonnet, by Joe Hooker	G. W. Trahern	Sacramento.
Jack Brady, by Wildidle	W. L. Davis	Ione.

SUMMARY.

Jack Brady	1
Blue Bonnet	2
Minnie B.	3

Time—1:20½; 1:20¾.

RACE NO. 4—RUNNING.

Free for all. Purse, one hundred and twenty-five dollars. Entrance, twelve dollars and fifty cents. Single dash, five eighths of a mile.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Menlo, by Young Prince	M. McCrimmon	Lincoln.
Maggie D, by Tim Douglass	D. Dennison	Sacramento.
Gray Gust, by Pachén	Wm. LaDue	Roseville.

SUMMARY.

Menlo.....	1
Maggie D	2
Gray Gust.....	3

Time—1:06½.

THURSDAY, AUGUST 23, 1888.

RACE NO. 5—RUNNING.

Purse, one hundred dollars; stake ten dollars added. Three eighths of a mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Gallagher, unknown	C. T. Bunch	Ione.
Barney G, unknown	U. S. Gregory	Ione.
Maggie D, by Tim Douglass	D. Dennison	Sacramento.

SUMMARY.

Barney G.....	1
Maggie D	2
Gallagher	3

Time—0:37½; 0:38.

RACE NO. 6—RUNNING.

Purse, one hundred dollars; stake ten dollars added. Three-quarter mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Minnie R, unknown	E. Flitner	Ione.
Painkiller, by Joe Hooker	Hi. Barton	Latrobe.
Blue Bonnet, by Joe Hooker	G. W. Trahern	Sacramento.

SUMMARY.

Blue Bonnet.....	1
Painkiller	2
Minnie R.....	3

Time—1:18½.

FRIDAY, AUGUST 24, 1888.

RACE NO. 7—RUNNING.

Purse, one hundred dollars. Entrance, ten dollars. Half mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Menlo, by Young Prince.....	M. McCrimmon.....	Lincoln.
Gray Gust, by Patchen.....	William LaDue.....	Roseville.
Minnie R, unknown.....	Hi. Barton.....	Latrobe.

SUMMARY.

Minnie R.....	1
Menlo.....	2
Gray Gust.....	3

Time—0:52 $\frac{1}{2}$; 0:52 $\frac{3}{4}$; 0:52 $\frac{1}{2}$.

RACE NO. 8—RUNNING.

Free for all. Purse, one hundred and fifty dollars. Fifteen dollars entrance. Half mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Jack Brady.....		

A walkover.

Time—1:38 $\frac{3}{4}$.

TRANSACTIONS

OF THE

NINTH DISTRICT AGRICULTURAL ASSOCIATION

For the Year 1888,

Composed of the Counties of Del Norte and Humboldt.

OFFICERS OF THE ASSOCIATION.

G. C. BARBER.....	President.
A. W. MOCK.....	Secretary.
L. FIEGENBAUM.....	Treasurer.

DIRECTORS.

G. C. BARBER	Ferndale.
S. F. PINE	Eureka.
R. J. BUGBEE	Ferndale.
J. D. BARBER.....	Hydesville.
C. L. THOMPSON.....	Camp Grant.
A. MASSON.....	Rohnerville.
B. H. McNEIL.....	Rohnerville.
H. C. RANSOM	Crescent City.

REPORT.

NOVEMBER 23, 1888.

To the honorable the State Board of Agriculture:

GENTLEMEN: The Directors of the Ninth District Agricultural Association submit this, their report of the transactions of said association, for the year ending this date.

A. W. MOCK, Secretary.

RECEIPTS AND EXPENDITURES.

Receipts.

Balance	\$31 99	
Received at the gate.....	3,325 00	
Received from privileges	415 25	
Received from pools	100 00	
Received from proceeds of ball	226 50	
Received from entrance fees	566 00	
Received from the State.....	1,000 00	
		<u>\$5,664 74</u>

Expenses.

Paid for premiums	\$1,856 00	
Paid for purses	1,282 50	
Paid sundry accounts	1,212 22	
Paid for printing and advertising	408 57½	
Paid for music	265 00	
Paid for hay and feed	137 18	
Paid for interest	21 63	
Balance on hand	481 63½	
		<u>\$5,664 74</u>

EXHIBITS AT THE FAIR—1888.

FIRST DEPARTMENT.

Name of Animal.	Owner.	Address.
CLASS I—THOROUGH-BRED HORSES—STALLIONS.		
Intruder, four years old or over.....	T. J. Knight.....	Beatrice.
MARES.		
Puss, four years old or over, with colt.....	T. J. Knight.....	Beatrice.
Kate, four years old or over, with colt.....	T. J. Knight.....	Beatrice.
MARES OR GELDINGS.		
Maria, three years old.....	T. J. Knight.....	Beatrice.
Susie D, three years old.....	L. E. Hunt.....	Eureka.
Mamie B, three years old.....	W. H. E. Smith.....	Rohnerville.
Linda Connor, three years old.....	T. J. Knight.....	Beatrice.
Clara K, three years old.....	T. J. Knight.....	Beatrice.
Why Not, two years old.....	W. H. Hogoboom.....	Rohnerville.
CLASS II—HORSES OF ALL WORK—STALLIONS.		
Providence, four years old or over.....	W. H. E. Smith.....	Rohnerville.
Young Providence, four years old or over.....	E. J. Baker.....	Ferndale.
Allen, four years old or over.....	T. J. Knight.....	Beatrice.
Farmer Boy, four years old or over.....	J. Evarts.....	Petrolia.
Humboldt Dave, four years old or over.....	A. H. Knight.....	Beatrice.
Nimrod, three years old.....	A. Forbes.....	Eureka.
Prince, three years old.....	George W. Byard.....	Fortuna.
Farmer, two years old.....	N. Friel.....	Ferndale.
MARES.		
Julia, four years old or over, with colt.....	J. D. Barber.....	Hydesville.
Julia, four years old or over, with colt.....	J. A. Myrick.....	Rohnerville.
Queen, four years old or over, with colt.....	T. J. Knight.....	Beatrice.
Minnie, four years old or over, with colt.....	A. Forbes.....	Eureka.
Esther, four years old or over, with colt.....	John Winslow.....	Beatrice.
MARES OR GELDINGS.		
Queen, three years old.....	A. Worthington.....	Ferndale.
Lucy, three years old.....	A. Worthington.....	Ferndale.
Rose, three years old.....	C. A. Johnson.....	Petrolia.
Eureka Maid, three years old.....	Isaac Creek.....	Eureka.
Dexter, two years old.....	H. Drake.....	Rohnerville.
May Queen, two years old.....	A. Forbes.....	Eureka.
Mirt, one year old.....	A. Forbes.....	Eureka.
Neddy, one year old.....	P. Kelley.....	Ferndale.
Johnny Nimrod, suckling colt.....	Isaac Creek.....	Eureka.
—, suckling colt.....	J. D. Barber.....	Hydesville.
General Harrison, suckling colt.....	H. Rohner.....	Fortuna.
Black Bess, suckling colt.....	C. L. Thompson.....	Camp Grant.
CLASS III—DRAFT HORSES—STALLIONS.		
Val Jean, four years old or over.....	W. H. E. Smith.....	Rohnerville.
New Orleans, four years old or over.....	W. H. E. Smith.....	Rohnerville.
Bonaparte, four years old or over.....	G. H. Gray.....	Hydesville.
John Shire, three years old.....	G. H. Gray.....	Hydesville.
Billy, three years old.....	John Winslow.....	Beatrice.
MARES.		
Lucy, four years old or over, with colt.....	John Winslow.....	Beatrice.

FIRST DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
MARES OR GELDINGS.		
Dolly, three years old.....	J. Lawson.....	Ferndale.
Cleveland, three years old.....	F. Z. Boynton.....	Ferndale.
Bertha, three years old.....	William Samuels.....	Ferndale.
Fannie, two years old.....	J. P. Jacobson.....	Eureka.
Jane, two years old.....	Daniel Hasten.....	Ferndale.
Nellie, two years old.....	P. Kelley.....	Ferndale.
Lady Grey, two years old.....	C. E. Spear.....	Ferndale.
Daisy Jean, one year old.....	W. S. Robinson.....	Bridgeville.
Lue, one year old.....	William Forbes.....	Ferndale.
CLASS IV—ROADSTERS—STALLIONS.		
Poscora Hayward, four years old or over.....	W. H. E. Smith.....	Rohnerville.
Idaho Patchen, four years old or over.....	T. J. Knight.....	Beatrice.
Highland Chief, four years old or over.....	G. H. Grey.....	Hydesville.
Ira, four years old or over.....	H. W. Cooper.....	Eureka.
Wallenstein, three years old.....	H. S. Hogoboom.....	Rohnerville.
Challenger, three years old.....	I. Minor.....	Arcata.
Comet, Jr., two years old.....	G. W. Byard.....	Fortuna.
Gold Rose, two years old.....	H. S. Hogoboom.....	Rohnerville.
Johnny Moor.....	S. Douglass.....	Rohnerville.
MARES, WITH COLT.		
Young Lightfoot, four years old or over.....	H. W. Cooper.....	Eureka.
Lady Felt, four years old or over.....	R. J. Bugbee.....	Ferndale.
Lady Lightfoot, four years old or over.....	W. H. E. Smith.....	Rohnerville.
Frida, four years old or over.....	A. C. Roussin.....	Ferndale.
Evalina, four years old or over.....	H. W. Cooper.....	Eureka.
Nellie, four years old or over.....	C. F. Roberts.....	Eureka.
Eva, four years old or over.....	T. J. Knight.....	Beatrice.
Nellie, four years old or over.....	S. Douglass.....	Rohnerville.
Betty, four years old or over.....	J. Nicols.....	Ferndale.
Fanny, four years old or over.....	Wm. Samuels.....	Ferndale.
MARES OR GELDINGS.		
Prince Hayward, three years old.....	P. H. Quinn.....	Eureka.
Junebug, three years old.....	P. H. Quinn.....	Eureka.
Posse, two years old.....	Dr. Eby.....	Rohnerville.
General Moor, one year old.....	C. E. Bryant.....	Rohnerville.
Vinco, one year old.....	Dr. Eby.....	Rohnerville.
Jolly Jogger, one year old.....	Dr. T. D. Felt.....	Rohnerville.
Johnny C, one year old.....	H. A. Myrick.....	Rohnerville.
Belle Moor, one year old.....	A. H. Knight.....	Beatrice.
Billie, one year old.....	P. Kelley.....	Ferndale.
Daisy N, suckling colt.....	J. W. Connick.....	Eureka.
—, suckling colt.....	A. C. Roussin.....	Ferndale.
—, suckling colt.....	A. C. Roussin.....	Ferndale.
CLASS V—CARRIAGE HORSES.		
Maud and Flora.....	I. B. Barnes.....	Ferndale.
.....	Ira Russ.....	Ferndale.
Lady Fox.....	F. McGraw.....	Eureka.
Salem Boy.....	Lewis Doe.....	Ferndale.
Rapid Ann.....	Dr. T. D. Felt.....	Rohnerville.
Senator.....	J. F. Roberts.....	Ferndale.
CLASS VI—ALL WORK OR DRAFT HORSES.		
Black double team.....	J. R. Myers.....	Rohnerville.
Gray double team.....	J. Dahle.....	Rohnerville.
CLASS VII—SADDLE HORSES.		
Bob, two years old or over.....	H. Rohner.....	Fortuna.
Ripple, two years old or over.....	Wm. Perrott.....	Rohnerville.
CLASS VIII—JACKS AND MULES.		
Duke.....	A. H. Knight.....	Beatrice.
Daisy*.....	J. W. Connick.....	Eureka.
Black colt*.....	J. Nicols.....	Ferndale.

*Special premium of fifty dollars awarded by H. W. Cooper to colts sired by Ira.

FIRST DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
CLASS I—CATTLE—DURHAMS—BULLS.		
Alex, three years old or over	J. A. Davenport	Ferndale.
Monesta, three years old or over	J. W. Kemp	Ferndale.
Dan'l Webster 2d, three years old or over	Wm. Forbes	Ferndale.
Brigham, two years old	Wm. Samuels	Ferndale.
2d Duke of Mad River, one year old	Edmonston Bros.	Arcata.
Bismarck, calf	F. Z. Boynton	Ferndale.
Dan'l Webster 3d, calf	Wm. Forbes	Ferndale.
COWS.		
Pink, three years old or over	J. W. Kemp	Ferndale.
Beauty, three years old or over	Wm. Forbes	Ferndale.
Sarah, three years old or over	Wm. Forbes	Ferndale.
Rose, three years old or over	W. N. Russ	Ferndale.
Tempest, calf	Wm. Forbes	Ferndale.
Sunshine, calf	Wm. Forbes	Ferndale.
JERSEYS AND ALDERNEYS—BULLS.		
King, three years old or over	S. F. Robinson	Rio Dell.
COWS.		
Nellie, three years old or over	J. W. Kemp	Ferndale.
Jack Rabbit, three years old or over	J. W. Kemp	Ferndale.
Kingtail, three years old or over	J. W. Kemp	Ferndale.
Star, three years old or over	J. W. Kemp	Ferndale.
Daisy, heifer calf	S. F. Robinson	Rio Dell.
AYRSHIRE—BULLS.		
Victor, three years old or over	G. W. Byard	Fortuna.
Roy, three years old or over	N. Hurlburt	Ferndale.
Scotland, three years old or over	N. Hurlburt	Ferndale.
Victor, two years old	N. Hurlburt	Ferndale.
Ranger, bull calf	N. Hurlburt	Ferndale.
Hurlburt, bull calf	Wm. Samuels	Ferndale.
COWS.		
Cora, three years old or over	N. Hurlburt	Ferndale.
Edith, three years old or over	N. Hurlburt	Ferndale.
Spot, two years old	N. Hurlburt	Ferndale.
Maud, one year old	N. Hurlburt	Ferndale.
Ruby, heifer calf	N. Hurlburt	Ferndale.
Sybil, heifer calf	N. Hurlburt	Ferndale.
Daisy, heifer calf	Wm. Samuels	Ferndale.
HOLSTEIN—BULLS.		
Dennoud S, two years old	A. Forbes	Eureka.
Elkwood, one year old	A. Forbes	Eureka.
Elko, one year old	A. Forbes	Eureka.
William, one year old	G. E. Hansen	Hydesville.
Island, bull calf	Wm. Forbes	Ferndale.
King, bull calf	Wm. Forbes	Ferndale.
COWS.		
Puritan, three years old or over	A. Forbes	Eureka.
Orphan Queen, three years old or over	A. Forbes	Eureka.
Eva, three years old or over	G. E. Hansen	Hydesville.
Rosabelle Strathmore, one year old	A. Forbes	Eureka.
Clam Pit, one year old	A. Forbes	Eureka.
Bellevue Flora, heifer calf	A. Forbes	Eureka.
Bellevue Burnie	A. Forbes	Eureka.
HEREFORD—BULLS.		
Prince, one year old	W. N. Russ	Ferndale.
Cesar, one year old	W. N. Russ	Ferndale.
Johnny, bull calf	W. N. Russ	Ferndale.
COWS.		
Jane, one year old	W. N. Russ	Ferndale.

FIRST DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
GRADED CATTLE—BULLS.		
Billie, three years old or over	C. De Carlie	Ferndale.
Mose, three years old or over	R. Bryant	Rohnerville.
—, two years old	A. H. Knight	Beatrice.
Brigham 2d, one year old	Wm. Samuels	Ferndale.
Tim, bull calf	Wm. Samuels	Ferndale.
Tim 2d, bull calf	Wm. Samuels	Ferndale.
Fred, bull calf	J. A. Davenport	Ferndale.
COWS.		
Cherry, three years old or over	C. De Carlie	Ferndale.
Jennie, three years old or over	Wm. Forbes	Ferndale.
Mary, three years old or over	Wm. Forbes	Ferndale.
Continental, three years old or over	Wm. Samuels	Ferndale.
Speck, three years old or over	Wm. Samuels	Ferndale.
Maggie, three years old or over	Wm. Samuels	Ferndale.
Betsy, three years old or over	R. Bryant	Rohnerville.
Queen, three years old or over	S. F. Robinson	Rio Dell.
Mabel, two years old	A. Forbes	Eureka.
Rose, one year old	J. A. Davenport	Ferndale.
Pet, one year old	J. A. Davenport	Ferndale.
—, one year old	J. S. East	Rohnerville.
Susy, one year old	C. De Carlie	Ferndale.
Rosy, one year old	C. De Carlie	Ferndale.
—, heifer calf	J. A. Davenport	Ferndale.
—, heifer calf	J. A. Davenport	Ferndale.
Jessie, heifer calf	C. De Carlie	Ferndale.
Star, heifer calf	C. De Carlie	Ferndale.
Lily, heifer calf	C. De Carlie	Ferndale.
Friesly, heifer calf	A. Forbes	Eureka.
CLASS I—SHEEP.		
Prince, Cotswold ram	A. H. Knight	Beatrice.
John, Merino ram	T. J. Knight	Beatrice.
Dick, Merino ram	T. J. Knight	Beatrice.
Cleveland, Shropshire ram	Wm. Samuels	Ferndale.
Cleveland 2d, Shropshire ram	Wm. Samuels	Ferndale.
Five Cotswold ewes	A. H. Knight	Beatrice.
Five Merino ewes	T. J. Knight	Beatrice.
Five Merino ewes	T. J. Knight	Beatrice.
Five Shropshire ewes	Wm. Samuels	Ferndale.
CLASS II—GRADED.		
—, ram	J. A. Davenport	Ferndale.
Bill, ram	T. J. Knight	Beatrice.
Charlie, ram	T. J. Knight	Beatrice.
Pete, ram	G. C. Barber	Ferndale.
Dick, ram	G. C. Barber	Ferndale.
Tom, ram	G. C. Barber	Ferndale.
Five ewes	J. A. Davenport	Ferndale.
Five ewes	A. H. Knight	Beatrice.
Five ewes	T. J. Knight	Beatrice.
Five ewes	T. J. Knight	Beatrice.
CLASS I—SWINE.		
Tom, Berkshire boar	M. P. Hansen	Rohnerville.
John, Essex boar	A. H. Knight	Beatrice.
—, Essex boar	J. S. East	Rohnerville.
Johnny, Poland-China boar	Wm. Samuels	Ferndale.
Maggie, Berkshire sow	M. P. Hansen	Rohnerville.
Black Bess, Berkshire sow	A. H. Knight	Beatrice.
Milkmaid, Berkshire sow	A. H. Knight	Beatrice.
—, Essex sow	A. H. Knight	Beatrice.
Betsy, Poland-China sow	Wm. Samuels	Ferndale.
Bess, Poland-China sow	Wm. Samuels	Ferndale.
Friel, boar of any breed	J. W. Kemp	Ferndale.
Johnny, boar of any breed	J. W. Kemp	Ferndale.
—, sow of any breed	A. H. Knight	Beatrice.
—, sow of any breed	J. S. East	Rohnerville.

TRANSACTIONS OF THE
FIRST DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
Five pigs of any breed.....	J. S. East.....	 Rohnerville.
Five pigs of any breed.....	Wm. Samuels.....	 Ferndale.
POULTRY.		
Lot of Black Spanish.....	M. Robinson.....	 Rohnerville.
Lot of Plymouth Rock.....	John Palmer.....	 Hydesville.
Lot of Plymouth Rock.....	Mrs. M. E. Swanger.....	 Rohnerville.
Lot of White Leghorns.....	M. Robinson.....	 Rohnerville.
Lot of White Leghorns.....	John Palmer.....	 Hydesville.
Lot of Brown Leghorns.....	M. Robinson.....	 Rohnerville.
Lot of Wyandottes.....	M. Robinson.....	 Rohnerville.
One pair of turkeys.....	J. P. Godfrey.....	 Hydesville.
One pair of turkeys.....	M. Robinson.....	 Hydesville.
One pair of ducks.....	G. Jackson.....	 Ferndale.

PREMIUMS AWARDED—1888.

FIRST DEPARTMENT.

Name of Animal.	Exhibitor.	Address.	Award.
CLASS I—THOROUGHBREDS—STALLIONS.			
Intruder	T. J. Knight.....	Beatrice	\$18 00
MARES.			
Puss	T. J. Knight.....	Beatrice	\$12 00
Puss	T. J. Knight.....	Beatrice	\$6 00
Susie D	T. L. Hank.....	Eureka	\$9 00
Linda Connor	T. J. Knight.....	Beatrice	\$5 00
Why Not	H. S. Hogoboom	Rohnerville	\$9 00
HORSES OF ALL WORK—STALLIONS.			
Allen	T. J. Knight.....	Beatrice	\$18 00
Farmer Boy	J. Evarts	Petrolia	\$12 00
Nimrod, three years old	A. Forbes	Eureka	\$12 00
Prince, three years old	G. W. Byard.....	Fortuna	\$6 00
Farmer, two years old	N. Friel	Ferndale	\$12 00
MARES.			
Julia	J. D. Barber	Hydesville	\$12 00
Rose	C. A. Johnson.....	Petrolia	\$6 00
Queen, three years old	A. Worthington.....	Ferndale	\$9 00
May Queen, two years old	A. Forbes	Eureka	\$5 00
Mirt, one years old	A. Forbes	Eureka	\$9 00
GELDINGS.			
Dexter, two years old	H. Drake	Rohnerville	\$9 00
SUCKLING COLTS.			
Johnny	Isaac Creek	Eureka	\$6 00
—, ...	J. D. Barber	Hydesville	\$3 00
DRAFT HORSES—STALLIONS.			
Val Jean	W. H. E. Smith	Rohnerville	\$18 00
New Orleans	W. H. E. Smith	Rohnerville	\$12 00
John Shire, three years old	G. H. Gray	Hydesville	\$12 00
Billy, three years old	J. Winslow	Beatrice	\$6 00
MARES.			
Lucy	J. Winslow	Beatrice	\$12 00
Dolly, three years old	J. Lawson	Ferndale	\$9 00
Jane, two years old	Daniel Hasten	Ferndale	\$9 00
Lady Grey, two years old	C. E. Spears	Ferndale	\$5 00
Lue, one year old	Wm. Forbes	Ferndale	\$9 00
Daisy Jean, one year old	W. S. Robinson	Ferndale	\$4 00
SUCKLING COLTS.			
Val	J. Winslow	Beatrice	\$5 00
GELDINGS.			
Cleveland, three years old	F. Z. Boynton.....	Ferndale	\$5 00
ROADSTERS—STALLIONS.			
Poscora Hayward	W. H. E. Smith	Rohnerville	\$18 00
Ira	H. W. Cooper	Beatrice	\$12 00
Wallenstein, three years old	H. S. Hogoboom	Rohnerville	\$12 00
Challenger, three years old	Ira Minor	Areata	\$6 00
Johnny Moor, two years old	S. Douglass	Rohnerville	\$12 00
Gold Rose, two years old	H. S. Hogoboom	Rohnerville	\$6 00

TRANSACTIONS OF THE
FIRST DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
MARES.			
Young Lightfoot.....	H. W. Cooper.....	Eureka.....	---\$12 00
Lady Felt.....	R. J. Bugbee.....	Ferndale.....	---\$6 00
Junebug, three years old.....	P. H. Quinn.....	Eureka.....	---\$5 00
Posse, two years old.....	Dr. Eby.....	Rohnerville.....	---\$9 00
Beile Moor, one year old.....	A. H. Knight.....	Beatrice.....	---\$4 00
GELDINGS.			
Prince Hayward, three years old.....	P. H. Quinn.....	Eureka.....	---\$9 00
Gen. Moor, one year old.....	C. E. Bryant.....	Rohnerville.....	---\$9 00
SUCKLING COLTS.			
Daisy N.....	J. W. Connick.....	Eureka.....	---\$6 00
—,.....	A. C. Roussin.....	Ferndale.....	---\$3 00
—,.....	Dr. J. D. Felt.....	Rohnerville.....	---\$9 00
—,.....	H. A. Myrick.....	Rohnerville.....	---\$4 00
CARRIAGE HORSES.			
Maud and Flora, carriage team.....	I. B. Barnes.....	Ferndale.....	---\$12 00
Carriage team.....	Ira Russ.....	Ferndale.....	---\$6 00
Lady Fox, buggy mare.....	F. McGraw.....	Eureka.....	---\$8 00
Salem Boy, buggy horse.....	Lewis Doe.....	Ferndale.....	---\$4 00
ALL WORK OR DRAFT HORSES.			
Black team.....	J. R. Myers.....	Rohnerville.....	---\$12 00
Gray team.....	J. Dahle.....	Rohnerville.....	---\$6 00
SADDLE HORSES.			
Bob, gelding.....	H. Rohner.....	Fortuna.....	---\$6 00
Ripple, gelding.....	Wm. Perrott.....	Rohnerville.....	---\$3 00
JACKS AND MULES.			
Duke, jack.....	A. H. Knight.....	Beatrice.....	---\$12 00
CATTLE—DURHAMS—BULLS.			
Daniel Webster.....	Wm. Forbes.....	Ferndale.....	---\$18 00
Alex.....	J. A. Davenport.....	Ferndale.....	---\$9 00
Brigham, two years old.....	Wm. Samuels.....	Ferndale.....	---\$12 00
2d Duke of Mad River, one year old.....	Edmonston Bros.....	Arcata.....	---\$9 00
Bismarck, calf.....	F. Z. Boynton.....	Ferndale.....	---\$6 00
Daniel Webster 3d, calf.....	Wm. Forbes.....	Ferndale.....	---\$3 00
COWS.			
Rose.....	W. N. Russ.....	Ferndale.....	---\$12 00
Sarah.....	Wm. Forbes.....	Ferndale.....	---\$6 00
Tempest, heifer calf.....	Wm. Forbes.....	Ferndale.....	---\$6 00
Sunshine, heifer calf.....	Wm. Forbes.....	Ferndale.....	---\$3 00
AYRSHIRES—BULLS.			
Scotland.....	N. Hurlburt.....	Ferndale.....	---\$18 00
Roy.....	N. Hurlburt.....	Ferndale.....	---\$9 00
Victor, two years old.....	N. Hurlburt.....	Ferndale.....	---\$12 00
Ranger, calf.....	N. Hurlburt.....	Ferndale.....	---\$6 00
Hurlburt, calf.....	Wm. Samuels.....	Ferndale.....	---\$3 00
COWS.			
Cora.....	N. Hurlburt.....	Ferndale.....	---\$12 00
Edith.....	N. Hurlburt.....	Ferndale.....	---\$6 00
Spat, two years old.....	N. Hurlburt.....	Ferndale.....	---\$12 00
Maud, one year old.....	N. Hurlburt.....	Ferndale.....	---\$9 00
Ruby, calf.....	N. Hurlburt.....	Ferndale.....	---\$6 00
Daisy, calf.....	Wm. Samuels.....	Ferndale.....	---\$3 00
JERSEYS—BULLS.			
King.....	S. F. Robinson.....	Rio Dell.....	---\$18 00
COWS.			
Star.....	J. W. Kemp.....	Ferndale.....	---\$12 00
Nellie.....	J. W. Kemp.....	Ferndale.....	---\$6 00
Daisy, calf.....	S. F. Robinson.....	Rio Dell.....	---\$6 00

FIRST DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
HOLSTEINS—BULLS.			
Dennond S	A. Forbes	Eureka	\$12 00
Elkwood, one year old	A. Forbes	Eureka	\$9 00
Elko	A. Forbes	Eureka	\$5 00
Island, calf	Wm. Forbes	Ferndale	\$6 00
William, calf	G. E. Hansen	Hydesville	\$3 00
COWS.			
Orphan Queen	A. Forbes	Eureka	\$12 00
Puritan	A. Forbes	Eureka	\$6 00
Rosabell Strathmore	A. Forbes	Eureka	\$5 00
Clam Pit	A. Forbes	Eureka	\$9 00
Flora, calf	A. Forbes	Eureka	\$6 00
Burnie, calf	A. Forbes	Eureka	\$3 00
HEREFORDS—BULLS.			
Cæsar, one year old	W. N. Russ	Ferndale	\$9 00
Prince, one year old	W. N. Russ	Ferndale	\$5 00
Johnny, calf	W. N. Russ	Ferndale	\$6 00
COWS.			
Jane, one year old	W. N. Russ	Ferndale	\$9 00
GRADED CATTLE—BULLS.			
Billie	C. De Carlie	Ferndale	\$9 00
Mose	R. Bryant	Rohnerville	\$4 00
—, two years old	A. H. Knight	Beatrice	\$9 00
Brigham	Wm. Samuels	Ferndale	\$6 00
Tim, calf	Wm. Samuels	Ferndale	\$4 00
Tim, Jr., calf	Wm. Samuels	Ferndale	\$2 00
COWS.			
Cherry, three years old	C. De Carlie	Ferndale	\$6 00
May, three years old	Wm. Forbes	Ferndale	\$3 00
Maybell, two years old	A. Forbes	Eureka	\$6 00
Rose, one year old	J. A. Davenport	Ferndale	\$4 00
Susy, one year old	C. De Carlie	Ferndale	\$2 00
Friesly, calf	A. Forbes	Eureka	\$3 00
Lily, calf	C. De Carlie	Ferndale	\$2 00
SHEEP.			
Cotswold ram	A. H. Knight	Beatrice	\$12 00
Merino ram	T. J. Knight	Beatrice	\$12 00
Merino ram	T. J. Knight	Beatrice	\$6 00
Cleveland, Shropshire ram	Wm. Samuels	Ferndale	\$12 00
Cleveland 2d, Shropshire ram	Wm. Samuels	Ferndale	\$6 00
Five Cotswold ewes	A. H. Knight	Beatrice	\$6 00
Five Merino ewes	T. J. Knight	Beatrice	\$6 00
Five Merino ewes	T. J. Knight	Beatrice	\$3 00
Five Shropshire ewes	Wm. Samuels	Ferndale	\$6 00
SWINE.			
Berkshire boar	M. P. Hansen	Rohnerville	\$6 00
Berkshire sow	M. P. Hansen	Rohnerville	\$6 00
Essex boar	J. S. East	Rohnerville	\$6 00
Essex boar, John	A. H. Knight	Beatrice	\$3 00
Essex sow	A. H. Knight	Beatrice	\$6 00
Johnny, Poland-China boar	Wm. Samuels	Ferndale	\$6 00
Betsy, Poland-China sow	Wm. Samuels	Ferndale	\$6 00
Bess, Poland-China sow	Wm. Samuels	Ferndale	\$3 00
Johnny, boar of any breed	J. W. Kemp	Ferndale	\$6 00
Friel, boar of any breed	J. W. Kemp	Ferndale	\$3 00
Pet, sow of any breed	J. A. Davenport	Ferndale	\$6 00
Sow of any breed	J. S. East	Rohnerville	\$3 00
Five pigs of any breed	J. S. East	Rohnerville	\$6 00
Five pigs of any breed	Wm. Samuels	Ferndale	\$3 00

FIRST DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
POULTRY.			
Exhibit of poultry	M. Robinson	Rohnerville	\$6 00
Lot of Black Spanish	M. Robinson	Rohnerville	\$2 00
Lot of Plymouth Rock	John Palmer	Hydesville	\$2 00
Lot of Plymouth Rock	Mrs. M. E. Swanger	Rohnerville	\$1 00
Lot of Wyandottes	M. Robinson	Rohnerville	\$2 00
Pair of ducks	W. Connick	Rohnerville	\$2 00
Pair of ducks	G. Jackson	Ferndale	\$1 00
Pair of turkeys	John Palmer	Hydesville	\$2 00
Pair of turkeys	John Palmer	Hydesville	\$1 00
Lot of White Leghorns	John Palmer	Hydesville	\$2 00
Lot of White Leghorns	M. Robinson	Rohnerville	\$1 00
Lot of Brown Leghorns	M. Robinson	Rohnerville	\$2 00
Lot of Brown Leghorns	John Palmer	Hydesville	\$1 00

SECOND DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I—MECHANICAL PRODUCTS.			
Farm or freight wagon	A. T. Rogers	Hydesville	\$10 00
Harrow	O. Hamill	Rohnerville	\$5 00
Best shod horse for light road work	A. D. Smith	Rohnerville	\$5 00
Best shod horse for heavy road work	A. D. Smith	Rohnerville	\$5 00
Best carriage harness, single	B. L. Wait, Jr.	Fortuna	\$5 00
Best set of carriage harness, single	B. L. Wait, Jr.	Fortuna	\$5 00
Best set of heavy harness	B. L. Wait	Fortuna	\$5 00
Best pair of buckskin gloves	P. F. McDonald	Eureka	\$2 00
Best display of brick	J. Thompson	Rohnerville	\$5 00
Best spring bed	Ruscoe & Lunblade	Eureka	\$5 00
Best lounge	Ruscoe & Lunblade	Eureka	\$5 00
Best display of furniture	Ruscoe & Lunblade	Eureka	\$15 00
Sidehill plow (special premium)	Mr. Sentney	Blocksburg	\$10 00
Mattock (special premium)	F. Leach	Rohnerville	\$5 00

THIRD DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Best five pounds of butter	J. A. Davenport	Ferndale	\$2 00
Second best five pounds of butter	G. Jackson	Ferndale	\$1 00
Best five pounds of butter	W. H. Wilson	Ferndale	\$5 00
Second best five pounds of butter	C. De Carlie	Ferndale	\$2 50
Best cheese	Chas. Vedder	Ferndale	\$5 00
Second best cheese	Chas. Vedder	Ferndale	\$2 50
Best bushel of wheat	J. P. Godfrey	Hydesville	\$4 00
Second best bushel of wheat	H. Drake	Rohnerville	\$2 50
Best bushel of barley	Biggs & Cartwright	Rohnerville	\$4 00
Second best bushel of barley	J. S. East	Rohnerville	\$2 50
Best bushel of oats	J. Anderson	Hydesville	\$4 00
Second best bushel of oats	H. Drake	Rohnerville	\$2 50
Best bushel of sweet peas	J. Hodge	Rohnerville	\$4 00
Second best bushel of sweet peas	J. Tower	Ferndale	\$2 50
Best bushel of blackeye peas	W. Connick	Rohnerville	\$4 00
Second best bushel of blackeye peas	J. A. Davenport	Ferndale	\$2 50
Best bushel of Niles peas	J. Hodge	Rohnerville	\$4 00
Second best bushel of Niles peas	H. Drake	Rohnerville	\$2 50
Best bushel of beans	J. Tower	Ferndale	\$4 00
Second best bushel of beans	G. E. Stewart	Rohnerville	\$2 50
Best two sheaves of oats	J. Dahle	Rohnerville	\$2 00

THIRD DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Second best two sheaves of oats.....	J. S. East.....	Rohnerville.....	\$1 00
Best two sheaves of wheat.....	J. P. Godfrey.....	Hydesville.....	\$2 00
Second best two sheaves of wheat.....	A. L. Stoddard.....	Ferndale.....	\$1 00
Best six stalks of corn.....	J. L. Newman.....	Camp Grant.....	\$2 00
Second best six stalks of corn.....	B. L. Wait.....	Ferndale.....	\$1 00
Best half dozen table carrots.....	J. S. East.....	Rohnerville.....	\$2 00
Second best half dozen table carrots.....	A. W. Reynolds.....	Ferndale.....	\$1 00
Best half dozen table beets.....	P. Hauck.....	Rohnerville.....	\$2 00
Second best half dozen table beets.....	A. W. Reynolds.....	Ferndale.....	\$1 00
Best half dozen stock beets.....	W. G. Nickerson.....	Ferndale.....	\$2 00
Second best half dozen stock beets.....	J. W. Kemp.....	Ferndale.....	\$1 00
Best half dozen stock carrots.....	E. Anderson.....	Ferndale.....	\$2 00
Second best half dozen stock carrots.....	J. S. East.....	Rohnerville.....	\$1 00
Best three cabbages.....	H. Owen.....	Ferndale.....	\$2 00
Second best three cabbages.....	J. Dinsmore.....	Ferndale.....	\$1 00
Best three squashes.....	J. S. East.....	Rohnerville.....	\$2 00
Second best three squashes.....	O. L. Stoddard.....	Ferndale.....	\$1 00
Best three pumpkins.....	F. Morris.....	Ferndale.....	\$2 00
Second best three pumpkins.....	P. Hauck.....	Rohnerville.....	\$1 00
Best three watermelons.....	J. J. Newman.....	Camp Grant.....	\$2 00
Second best three watermelons.....	A. Hansel & Sons.....	Camp Grant.....	\$1 00
Best three muskmelons.....	A. Hansel & Sons.....	Camp Grant.....	\$2 00
Second best three muskmelons.....	G. E. Stewart.....	Rohnerville.....	\$1 00
Best display of cucumbers.....	John Hodge.....	Rohnerville.....	\$2 00
Second best display of cucumbers.....	B. L. Wait.....	Ferndale.....	\$1 00
Best display of tomatoes.....	Mrs. R. A. Luttman.....	Hydesville.....	\$2 00
Second best display of tomatoes.....	J. J. Newman.....	Camp Grant.....	\$1 00
Best one bushel of potatoes.....	P. Hauck.....	Rohnerville.....	\$5 00
Second best one bushel of potatoes.....	G. E. Stewart.....	Rohnerville.....	\$2 50
Best display of potatoes.....	J. S. East.....	Rohnerville.....	\$3 00
Second best display of potatoes.....	James Hodge.....	Rohnerville.....	\$2 00
Best display of sweet potatoes.....	A. J. Myers.....	Camp Grant.....	\$2 00
Best display of onions.....	C. Langdon.....	Rohnerville.....	\$2 00
Second best display of onions.....	B. L. Wait.....	Ferndale.....	\$1 00
HAM, BACON, AND LARD.			
Best bacon.....	D. L. Shinn.....	Petrolia.....	\$4 00
Best ham.....	D. L. Shinn.....	Petrolia.....	\$4 00
Best lard.....	D. L. Shinn.....	Petrolia.....	\$4 00
BREAD AND PASTRY.			
Best two loaves of home-made bread of corn.....	Mrs. Chas. Perrott.....	Rohnerville.....	\$2 00
Second best two loaves of home-made bread of corn.....	Mrs. G. C. Barber.....	Ferndale.....	\$1 00
Best two loaves of home-made bread of rye.....	Mrs. Henry Lane.....	Fortuna.....	\$2 00
Best two loaves of home-made bread of wheat.....	Mrs. B. H. McNeil.....	Rohnerville.....	\$2 00
Second best two loaves of home-made bread of wheat.....	Mrs. Henry Lane.....	Fortuna.....	\$1 00
Best pan of biscuit.....	Mrs. B. H. McNeil.....	Rohnerville.....	\$2 00
Second best pan of biscuit.....	Mrs. Henry Lane.....	Fortuna.....	\$1 00
Best display of pastry.....	Mrs. Henry Lane.....	Fortuna.....	\$5 00
Second best display of pastry.....	Mrs. W. H. Owens.....	Ferndale.....	\$2 50
CLASS II—FLOWERS.			
Best display of flowers in a box or stand— not less than fifteen varieties.....	Miss M. Woolridge.....	Ferndale.....	\$10 00
Second best display of flowers in a box or stand—not less than fifteen varieties.....	Mrs. M. Woolridge.....	Ferndale.....	\$5 00
Third best display of flowers in a box or stand—not less than fifteen varieties.....	Mrs. H. Woolridge.....	Ferndale.....	\$3 00
Fourth best display of flowers in a box or stand—not less than fifteen varieties.....	Miss M. Woolridge.....	Ferndale.....	\$2 00
Best bouquet.....	Mrs. H. Woolridge.....	Ferndale.....	\$3 00
Second best bouquet.....	Miss M. Woolridge.....	Ferndale.....	\$2 00
Third best bouquet.....	Miss M. Woolridge.....	Ferndale.....	\$1 00

FOURTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I—FRUIT.			
Best display of fruit of all kinds.....	A. Hansel & Sons.	Camp Grant.....	\$15 00
Second best display of fruit of all kinds.....	J. J. Newman	Camp Grant.....	\$7 50
Best five varieties of apples, correctly named.....	J. J. Newman	Camp Grant.....	\$10 00
Second best five varieties of apples, correctly named.....	A. Hansel & Sons.	Camp Grant.....	\$5 00
Best display of pears.....	A. Hansel & Sons.	Camp Grant.....	\$2 00
Best display of quinces.....	J. H. Smith.....	Camp Grant.....	\$2 00
Best display of grapes.....	A. J. Myers.....	Camp Grant.....	\$2 00
Best display of prunes.....	P. Hauck.....	Rohnerville.....	\$2 00
Best display of peaches.....	J. J. Newman.....	Camp Grant.....	\$5 00
Best two bottles of currant wine.....	Mrs. R. B. Price.....	Ferndale.....	\$2 00
Best two bottles of blackberry wine.....	Mrs. R. B. Price.....	Ferndale.....	\$2 00
CLASS II—PLUMS, JELLIES, AND PRESERVES.			
Best plum jam.....	Mrs. G. Patrick.....	Ferndale.....	\$2 00
Second best plum jam.....	Mrs. M. F. Baker.....	Ferndale.....	\$1 00
Best currant jam.....	Mrs. G. Patrick.....	Ferndale.....	\$2 00
Second best currant jam.....	Miss Lilly Hawe.....	Ferndale.....	\$1 00
Best raspberry jam.....	Mrs. G. Patrick.....	Ferndale.....	\$2 00
Second best raspberry jam.....	Mrs. M. F. Baker.....	Ferndale.....	\$1 00
Best blackberry jam.....	Mrs. G. Patrick.....	Ferndale.....	\$2 00
Second best blackberry jam.....	Mrs. J. A. Coyle.....	Hydesville.....	\$1 00
Best currant jelly.....	Mrs. B. H. McNeil.....	Rohnerville.....	\$2 00
Second best currant jelly.....	Mrs. J. A. Coyle.....	Hydesville.....	\$1 00
Best apple jelly.....	Mrs. A. Worthington.....	Ferndale.....	\$2 00
Second best apple jelly.....	Mrs. J. L. Dudley.....	Ferndale.....	\$1 00
Best blackberry jelly.....	Mrs. G. C. Barber.....	Ferndale.....	12 00
Second best blackberry jelly.....	Mrs. J. A. Coyle.....	Hydesville.....	\$1 00
Best crabapple jelly.....	Mrs. R. A. Luttman.....	Hydesville.....	\$2 00
Second best crabapple jelly.....	Mrs. G. Patrick.....	Ferndale.....	\$1 00
Best raspberry jelly.....	Mrs. A. Worthington.....	Ferndale.....	\$2 00
Second best raspberry jelly.....	Mrs. G. C. Barber.....	Ferndale.....	\$1 00
Best peach jelly.....	Mrs. A. Worthington.....	Ferndale.....	\$2 00
Second best peach jelly.....	Mrs. D. M. Bryant.....	Ferndale.....	\$1 00
Best plum jelly.....	Mrs. J. D. Barber.....	Hydesville.....	\$2 00
Second best plum jelly.....	Mrs. J. L. Dudley.....	Ferndale.....	\$1 00
Best quince jelly.....	Mrs. J. D. Barber.....	Hydesville.....	\$2 00
Second best quince jelly.....	Mrs. D. M. Bryant.....	Ferndale.....	\$1 00
Best watermelon preserves.....	Mrs. A. W. Mock.....	Rohnerville.....	\$2 00
Second best watermelon preserves.....	Mrs. G. Patrick.....	Ferndale.....	\$1 00
Best cranberry preserves.....	Mrs. M. T. Baker.....	Ferndale.....	\$2 00
Second best cranberry preserves.....	Miss Lilly Hawe.....	Ferndale.....	\$1 00
Best tomato preserves.....	Mrs. Ella Reed.....	Rohnerville.....	\$2 00
Second best tomato preserves.....	Mrs. A. Worthington.....	Ferndale.....	\$1 00
Best currant preserves.....	Mrs. M. T. Baker.....	Ferndale.....	\$2 00
Second best currant preserves.....	Mrs. G. Patrick.....	Ferndale.....	\$1 00
Best crabapple preserves.....	Mrs. A. Worthington.....	Ferndale.....	\$2 00
Second best crabapple preserves.....	Mrs. G. Patrick.....	Ferndale.....	\$1 00
Best pear preserves.....	Mrs. B. H. McNeil.....	Rohnerville.....	\$2 00
Second best pear preserves.....	Mrs. J. L. Dudley.....	Ferndale.....	\$1 00
Best blackberry preserves.....	Mrs. G. Patrick.....	Ferndale.....	\$2 00
Second best blackberry preserves.....	Mrs. M. T. Baker.....	Ferndale.....	\$1 00
Best plum preserves.....	Mrs. J. L. Dudley.....	Ferndale.....	\$2 00
Second best plum preserves.....	Mrs. G. Patrick.....	Ferndale.....	\$1 00
Best quince preserves.....	Mrs. Ella Reed.....	Rohnerville.....	\$2 00
Second best quince preserves.....	Mrs. J. L. Dudley.....	Ferndale.....	\$1 00
Best cherry preserves.....	Mrs. G. Patrick.....	Ferndale.....	\$2 00
Second best cherry preserves.....	Mrs. J. L. Dudley.....	Ferndale.....	\$1 00
Best crabapple preserves.....	Mrs. B. H. McNeil.....	Rohnerville.....	\$2 00
Second best crabapple preserves.....	Mrs. J. L. Dudley.....	Ferndale.....	\$1 00

FOURTH DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Best peach preserves	Mrs. J. L. Dudley	Ferndale	\$2 00
Second best peach preserves	Mrs. G. Patrick	Ferndale	\$1 00
Best apple butter	Mrs. G. C. Barber	Ferndale	\$2 00
Second best apple butter	Mrs. M. T. Baker	Ferndale	\$1 00
Best peach butter	Mrs. G. Patrick	Ferndale	\$2 00
Second best peach butter	Mrs. A. Worthington	Ferndale	\$1 00
Best plum butter	Mrs. G. Patrick	Ferndale	\$2 00
Second best plum butter	Mrs. A. Worthington	Ferndale	\$1 00
Best tomato butter	Mrs. G. Patrick	Ferndale	\$2 00
Second best tomato butter	Mrs. M. T. Baker	Ferndale	\$1 00
Best fresh canned fruit	Mrs. R. A. Luttman	Hydesville	\$3 00
Second best fresh canned fruit	Mrs. H. Worthington	Ferndale	\$4 00
Best display of preserves, apple butter, jams, and jellies	Mrs. G. Patrick	Ferndale	\$5 00
Second best display of preserves, apple butter, jams, and jellies	Mrs. M. T. Baker	Ferndale	\$2 50
Best display of dried apples	G. C. Barber	Ferndale	\$2 00
Second best display of dried apples	H. Stegemier	Camp Grant	\$1 00
Best display of dried plums	G. C. Barber	Ferndale	\$2 00
Second best display of dried plums	H. Stegemier	Camp Grant	\$1 00
Best display of dried prunes	G. C. Barber	Ferndale	\$2 00
Second best display of dried prunes	H. Stegemier	Camp Grant	\$1 00
Best display of dried pears	G. C. Barber	Ferndale	\$2 00
Second best display of dried pears	H. Stegemier	Camp Grant	\$1 00
Best display of dried peaches	G. C. Barber	Ferndale	\$2 00
Second best display of dried peaches	H. Stegemier	Camp Grant	\$1 00
Best display of dried corn	G. C. Barber	Ferndale	\$2 00
Best display of dried fruits	G. C. Barber	Ferndale	\$5 00
Second best display of dried fruits	H. Stegemier	Camp Grant	\$1 00

FIFTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I—HOUSEHOLD FABRICS.			
Best rag carpet	Mrs. W. Underwood	Fortuna	\$5 00
Second best rag carpet	Mrs. John Berry	Ferndale	\$2 50
Best rug, braided	Mrs. W. Bohall	Fortuna	\$2 00
Second best rug, braided	Mrs. G. C. Barber	Ferndale	\$1 50
Best rug, yarn or worsted	Mrs. W. H. Owens	Ferndale	\$3 00
Second best rug, yarn or worsted	Mrs. L. M. Smith	Ferndale	\$1 50
Best slipper case	Mrs. N. N. Brown	Eureka	\$2 00
Best pillow sham	Miss Clara Kehoe	Rohnerville	\$2 00
Second best pillow sham	Mrs. A. L. Elsmore	Eureka	\$1 00
Best darned net pillow sham	Miss M. McMahon	Blocksburg	\$4 00
Second best darned net pillow sham	Miss M. Cruickshank	Blocksburg	\$2 00
Best specimen of hand sewing	Mrs. B. F. Farnham	Eureka	\$3 00
Second best specimen of hand sewing	Mrs. Ira Brazee	Rohnerville	\$1 50
Best sewing machine work	Mrs. B. F. Farnham	Eureka	\$3 00
Second best sewing machine work	Mrs. C. F. Roberts	Eureka	\$1 50
Best sofa pillow	Mrs. J. T. Manon	Rohnerville	\$2 00
Second best sofa pillow	Kate Fitzsimmons	Beatrice	\$1 00
Best child's dress	Mrs. C. F. Roberts	Eureka	\$2 00
Second best child's dress	Mrs. C. F. Roberts	Eureka	\$1 00
Best spread, other than knit or crochet	Mrs. A. L. Elsmore	Eureka	\$2 00
Second best spread, other than knit or crochet	Mrs. H. Kelley	Ferndale	\$1 00
Best specimen of quilting	Mrs. N. N. Brown	Eureka	\$3 00
Second best specimen of quilting	Miss E. Wolverton	Ferndale	\$1 50
Nicest arranged crazy quilt	Miss Emma Carr	Eureka	\$5 00
Best patchwork quilt, of cotton	Mrs. M. F. Blackburn	Eureka	\$4 00

FIFTH DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Second best patchwork quilt, of cotton ..	Miss M. Bartlett ..	Ferndale ..	\$2 00
Best patchwork quilt, of worsted ..	Miss Lilly Hawe ..	Ferndale ..	\$4 00
Second best patchwork quilt, of worsted ..	Mrs. M. Bugbee ..	Ferndale ..	\$2 00
Best bedspread, crochet ..	Miss Anna Dahle ..	Rohnerville ..	\$5 00
Second best bedspread, crochet ..	Miss M. McMahon ..	Blocksburg ..	\$2 50
Best bedspread, knit ..	Mrs. R. B. Price ..	Ferndale ..	\$5 00
Best knit skirt ..	Mrs. Wm. Forbes ..	Ferndale ..	\$4 00
Second best knit skirt ..	Mrs. N. N. Brown ..	Eureka ..	\$2 00
CLASS II—EMBROIDERY, CROCHET, TATTING, ETC.			
Best crochet skirt ..	Mrs. Wm. Forbes ..	Ferndale ..	\$4 00
Second best crochet skirt ..	Miss Emma Carr ..	Eureka ..	\$2 00
Best worsted crochet tidy ..	Mrs. Capt. Adams ..	Ferndale ..	\$3 00
Second best worsted crochet tidy ..	Mrs. H. Lane ..	Fortuna ..	\$1 50
Best knit tidy ..	Mrs. R. B. Price ..	Ferndale ..	\$3 00
Second best knit tidy ..	Miss E. Jackson ..	Eureka ..	\$1 50
Best tidy ..	Mrs. J. Evarts ..	Petrolia ..	\$3 00
Best cotton crochet tidy ..	Mrs. Ira Brazee ..	Fortuna ..	\$2 00
Second best cotton crochet tidy ..	Miss M. McMahon ..	Blocksburg ..	\$1 50
Best canvas tidy ..	Miss M. Dudley ..	Petrolia ..	\$3 00
Second best canvas tidy ..	Mrs. Ida L. Pascoe ..	Rio Dell ..	\$1 50
Best darned net tidy ..	Mrs. Capt. Adams ..	Ferndale ..	\$3 00
Second best darned net tidy ..	Mrs. Capt. Adams ..	Ferndale ..	\$1 50
Best toilet set, crochet ..	Mrs. J. Poinsett ..	Arcata ..	\$2 00
Second best toilet set, crochet ..	Mrs. H. Woolridge ..	Ferndale ..	\$1 50
Best table scarf ..	Mrs. W. T. Bonstell ..	Eureka ..	\$2 00
Second best table scarf ..	Mrs. E. B. Pape ..	Arcata ..	\$1 00
Best lamp mat ..	Miss A. Speeks ..	Hydesville ..	\$1 00
Best toilet cushion ..	Mrs. E. J. Ruddock ..	Eureka ..	\$1 00
Second best toilet cushion ..	Mrs. E. M. Craig ..	Eureka ..	\$1 50
Best toilet set, on canvas ..	Mrs. C. F. Roberts ..	Eureka ..	\$1 00
Best specimen of outline embroidery ..	Mrs. E. M. Stone ..	Eureka ..	\$1 00
Best specimen of ribbon embroidery ..	Mrs. E. J. Ruddock ..	Eureka ..	\$2 00
Best specimen of chenille embroidery ..	Mrs. E. J. Ruddock ..	Eureka ..	\$2 00
Second best specimen of chenille embroidery ..	Mrs. E. J. Ruddock ..	Eureka ..	\$1 00
Best specimen of silk embroidery ..	Mrs. E. Galloway ..	Ferndale ..	\$1 00
Second best specimen of silk embroidery ..	Mrs. C. F. Roberts ..	Eureka ..	\$0 50
Best specimen of cotton embroidery ..	Mrs. E. Galloway ..	Ferndale ..	\$1 00
Second best specimen of cotton embroidery ..	Mrs. E. Galloway ..	Ferndale ..	\$0 50
Best specimen of worsted embroidery ..	Mrs. E. Galloway ..	Ferndale ..	\$1 00
Best specimen of Spanish work ..	Mrs. Evarts ..	Petrolia ..	\$2 00
Best specimen of braiding ..	Mrs. P. Robarts ..	Ferndale ..	\$1 00
Second best specimen of braiding ..	Mrs. P. Robarts ..	Ferndale ..	\$0 50
Best specimen of knit lace ..	Mrs. P. F. Hart ..	Ferndale ..	\$2 00
Best specimen of knit lace ..	Mrs. I. Brazee ..	Rohnerville ..	\$1 00
Second best specimen of knit lace ..	Mrs. P. F. Hart ..	Ferndale ..	\$1 00
Best specimen of point lace ..	Mrs. E. J. Ruddock ..	Eureka ..	\$5 00
Second best specimen of point lace ..	Miss B. Stewart ..	Eureka ..	\$2 50
Best specimen of kensington work ..	Mrs. W. T. Bonstell ..	Eureka ..	\$5 00
Best applique work ..	Mrs. M. T. Blackburn ..	Eureka ..	\$4 00
Second best applique work ..	Mrs. E. J. Ruddock ..	Eureka ..	\$2 00
Best worsted crochet shawl ..	Mrs. A. L. Elsmore ..	Eureka ..	\$3 00
Second best worsted crochet shawl ..	Miss Ida Glascock ..	Ferndale ..	\$1 50
Best display of macrame work ..	Mrs. E. J. Francis ..	Ferndale ..	\$2 00
Best bead work ..	Mrs. H. Woolridge ..	Ferndale ..	\$2 00
Second best bead work ..	Mrs. J. A. Coyle ..	Hydesville ..	\$1 00
Best lambrequin ..	Mrs. W. M. Fuller ..	Rohnerville ..	\$2 00
Second best lambrequin ..	Mrs. E. J. Ruddock ..	Eureka ..	\$1 00
Best splasher ..	Miss M. McMahon ..	Blocksburg ..	\$2 00
Second best splasher ..	Mrs. N. N. Brown ..	Eureka ..	\$1 00
Best specimen of rickrack ..	Miss E. Jackson ..	Eureka ..	\$2 00
Second best specimen of rickrack ..	Mrs. J. Poinsett ..	Arcata ..	\$1 00
Best carriage crochet robe ..	Mrs. P. Robarts ..	Ferndale ..	\$4 00
Second best carriage crochet robe ..	Mrs. Capt. Adams ..	Ferndale ..	\$2 00

FIFTH DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS III—ORNAMENTAL AND FANCY WORK.			
Best agricultural wreath	Mrs. M. Lithgrow ..	Rohnerville	\$2 00
Best specimen of hair work	Mrs. M. Perrott ..	Rohnerville	\$2 00
Handsomest display of fancy articles by lady or miss	Mrs. E. J. Ruddock ..	Eureka	\$10 00
Second best display of fancy articles by lady or miss	Mrs. N. N. Brown ..	Eureka	\$5 00
CLASS IV—PAINTING AND DRAWING.			
Best specimen of oil painting, landscape or marine	Mrs. Ida L. Pascoe ..	Rio Dell	\$5 00
Second best oil painting, landscape or marine	Mrs. Ida L. Pascoe ..	Rio Dell	\$2 50
Best specimen of oil painting, flowers	Mrs. Ida L. Pascoe ..	Rio Dell	\$5 00
Second best oil painting, flowers	Miss Nellie Fay ..	Eureka	\$2 50
Best specimen of kensington painting	Mrs. E. B. Pape ..	Arcata	\$5 00
Second best specimen of kensington painting	Mrs. B. Farnham ..	Eureka	\$2 50
Best painting on china	Mrs. C. F. Roberts ..	Eureka	\$5 00
Best luster painting	Mrs. C. S. Kendall ..	Petrolia	\$4 00
Best water color flowers	Mrs. C. S. Kendall ..	Petrolia	\$5 00
Second best water color flowers	Miss E. S. Clift ..	Rohnerville	\$2 50
Best water color portrait	G. B. Watkins ..	Eureka	\$5 00
Second best water color portrait	G. B. Watkins ..	Eureka	\$2 50
Best crayon drawing portrait	Miss Nellie Fay ..	Eureka	\$5 00
Best crayon drawing landscape	Fred Hansen ..	Hydesville	\$5 00
Best pencil drawing	A. E. McLaren ..	Eureka	\$5 00
Best oil painting on satin	Mrs. Ida L. Pascoe ..	Rio Dell	\$2 50
Best specimen of penmanship	W. H. Crawford ..	Eureka	\$4 00
Second best specimen of penmanship	John A. Lane ..	Fortuna	\$2 00
Best display of canary birds in cage	Miss L. Reynolds ..	Ferndale	\$5 00
Second best display of canary birds in cage	Mrs. M. T. Baker ..	Ferndale	\$2 50

JUVENILE DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Best patchwork	Miss M. Davenport ..	Ferndale	\$1 00
Second best	Miss L. Bryant ..	Rohnerville	\$0 50
Best hand-sewing	Miss M. Davenport ..	Ferndale	\$1 00
Second best	Miss Mills ..	Ferndale	\$0 50
Best crochet work	Miss Mills ..	Ferndale	\$1 00
Best toilet set	Miss H. Thompson ..	Rohnerville	\$1 00
Second best	Miss A. Hunter ..	Petrolia	\$0 50
Best air castle	Miss M. Woolridge ..	Ferndale	\$1 00
Second best	Miss J. Hamner ..	Ferndale	\$0 50
Best hanging basket	Miss M. Woolridge ..	Ferndale	\$1 00
Best pencil drawing	Chas. Southerland ..	Eureka	\$2 00
Best map drawing	Miss Offie Pape ..	Arcata	\$2 00
Best specimen of penmanship	John A. Lane ..	Fortuna	\$4 00

LADIES' EQUESTRIANSHIP.

Position.	Name.	Address.	Award.
Second best	Miss Rena Bonstell ..	Eureka	\$2 00
Best lady rider	Mrs. Minor ..	Ferndale	\$15 00
Second best	Mrs. Soper ..	Ferndale	\$10 00
Third best	Miss L. Kay ..	Rohnerville	\$5 00

SPEED PROGRAMME.

TUESDAY, SEPTEMBER 25, 1888.

RACE No. 1—RUNNING.

Free for all saddle horses owned in the district, having no record under fifty-eight seconds. Horses entered for other than saddle races barred. Purse, thirty dollars. First horse, twenty dollars; second, ten dollars. Catch weights. Half mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Sleepy John	W. G. Graham	Eureka.
Susie D	L. Hunt	Eureka.
Pat	Charles Moore	Rohnerville.
Linda Connor	T. J. Knight	Beatrice.
Cricket	Steve McKee	Petrolia.
Compromise	A. Ironmonger	Ferndale.
Combination	F. S. Watson	Ferndale.

SUMMARY.

Susie D	1	1
Linda Connor	2	2
Combination		dis.

Time—0:55; 0:55½.

RACE No. 2—RUNNING.

Purse, seventy-five dollars. First horse, fifty dollars; second, twenty-five dollars. Quarter-mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Edith R	H. C. Ransom	Crescent City.
Stoneman	T. J. Knight	Beatrice.
Black Bess	George Crippen	Petrolia.
Johnny D	J. D. Dougherty	Petrolia.

SUMMARY.

Edith R	1
Black Bess	2
Stoneman	3
Johnny D	4

Time—0:23½.

WEDNESDAY, SEPTEMBER 26, 1888.

RACE No. 3—TROTTING.

3:00 Class. Purse, one hundred and fifty dollars. First horse, one hundred dollars; second, fifty dollars. Mile heats; two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Daisy Hayward	R. Noble	Fortuna.
Johnny Moor	S. Douglass	Rohnerville.
Prince Hayward	P. H. Quinn	Eureka.

SUMMARY.

Daisy Hayward	1 1
Prince Hayward	2 2
Johnny Moor	dr.

Time—3:08; 3:08½.

RACE No. 4—TROTTING.

For two-year olds. Purse, one hundred and twenty-five dollars. First horse, eighty-five dollars; second, forty-five dollars. Mile heats; two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Posse	W. F. Eby	Rohnerville.
Dandy Moor	R. Noble	Fortuna.
Johnny Moor	S. Douglass	Rohnerville.

SUMMARY.

Johnny Moor	1 1
Posse	2 2
Dandy Moore	dr.

Time—3:18; 3:15.

RACE No. 5—RUNNING.

Free for all. Purse, one hundred and fifty dollars. First horse, one hundred dollars; second, fifty dollars. Three fourths of a mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Thunderbolt	S. B. Barnes	Ferndale.
Gray Eagle	H. C. Ransom	Crescent City.
Harry B.	A. H. Knight	Beatrice.
Maria	T. J. Knight	Beatrice.
Stoneman	T. J. Knight	Beatrice.
Whynot	H. S. Hogoboom	Rohnerville.
Amy B.	W. H. E. Smith	Rohnerville.

SUMMARY.

Stoneman	1 1
Amy B.	2 3
Harry B.	4 2
Gray Eagle	3 dis.
Thunderbolt	5 dis.

Time—1:20¾; 1:19.

THURSDAY, SEPTEMBER 27, 1888.

RACE NO. 6—TROTTING.

2:45 Class. Purse, one hundred and seventy-five dollars. First horse, one hundred and twenty dollars; second, fifty-five dollars. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Daisy Hayward	R. Noble	Fortuna.
Electric	T. F. Ricks	Eureka.
Bert Holmes	Robert Holmes	Eureka.
Silver Shield	A. A. Frank	Rohnerville.

SUMMARY.

Electric	1	0	2	2	1	1
Bert Holmes	2	0	1	1	2	2
Silver Shield	3	3	3	3		

Time—2:42 $\frac{3}{4}$; 2:43 $\frac{1}{2}$; 2:43 $\frac{1}{2}$; 2:42; 2:43; 2:44 $\frac{1}{4}$.

RACE NO. 8—RUNNING.

Purse, one hundred dollars. First horse, seventy dollars; second, thirty dollars. Half mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Edith R	H. C. Ransom	Crescent City.
Stoneman	T. J. Knight	Beatrice.
White-eye Tom	J. Goff	Fortuna.

SUMMARY.

Stoneman	0	1	1
Edith R	0	2	2

Time—0:53 $\frac{1}{2}$; 0:54.

RACE NO. 9—TROTTING.

Ferndale Merchant Stake, for buggy horses owned in Ferndale prior to June 1, 1888. No horse allowed to enter that has been trained or driven on a race track in 1888. All horses to be driven to cart. Five to enter, and three to start. First horse, twenty dollars; second, five dollars; third to save entrance fee. Two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Totten	G. M. Brice	Ferndale.
Pearl	P. W. Robarts	Ferndale.
Restless	R. W. Robarts	Ferndale.
Senator	J. T. Roberts	Ferndale.
Poscora Hayward, Jr.	D. McGregor	Ferndale.
Racquette	J. Dungan	Ferndale.

SUMMARY.

Racquette	1	1
Poscora Hayward, Jr.	2	2
Totten	3	5
Restless	5	3
Pearl	4	4
Senator	6	6

Time—3:02; 2:56 $\frac{1}{2}$.

FRIDAY, SEPTEMBER 28, 1888.

SPECIAL RACE—RUNNING.

For three-year olds. Purse, seventy-five dollars. Half mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Roan Dick	Geo. Crippen	 Petrolia.
Patsy	W. Bryant	 Petrolia.
Black Pet	F. S. Watson	 Petrolia.

SUMMARY.

Black Pet	1
Roan Dick	2
Patsy	3

Time—0:53½.

RACE No. 10—RUNNING.

Free for all. Purse, one hundred and fifty dollars. First horse, one hundred dollars; second, fifty dollars. One and one fourth mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Thunderbolt	I. B. Barnes	 Ferndale.
Harry B.	A. H. Knight	 Beatrice.
Maria	T. J. Knight	 Beatrice.
Whynot	H. S. Hogoboom	 Rohnerville.
Amy B.	W. H. E. Smith	 Rohnerville.

SUMMARY.

Whynot	1
Amy B.	2
Harry B.	3
Thunderbolt	4
Maria	5

Time—2:21¼.

RACE No. 11—TROTTING.

Free for all. Purse, three hundred and fifty dollars. First horse, two hundred dollars; second, one hundred dollars; third, fifty dollars. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Idaho Patchen	T. J. Knight	 Beatrice.
Poscora Hayward	W. H. E. Smith	 Rohnerville.

Poscora Hayward withdrawn on account of lameness.

RACE No. 7—TROTTING.

For three-year olds. Purse, one hundred and twenty-five dollars. First horse, eighty-five dollars; second, forty dollars. Mile heats; two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Daisy Hayward.....	R. Noble.....	Fortuna.
Silver Shield.....	A. A. Frank.....	Rohnerville.
Prince Hayward.....	P. H. Quinn.....	Eureka.

SUMMARY.

Daisy Hayward.....	1	1
Silver Shield.....	2	2

Time—2:51; 2:48.

RACE No. 12—RUNNING.

Free for all. Purse, one hundred and fifty dollars. First horse, one hundred dollars; second, fifty dollars. Half mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Gray Eagle.....	H. C. Ransom.....	Crescent City.
Stoneman.....	T. J. Knight.....	Beatrice.

SUMMARY.

Stoneman.....	1	1
Gray Eagle.....	2	2

Time—0:52 $\frac{1}{4}$; 0:54 $\frac{1}{2}$.

TRANSACTIONS

OF THE

TENTH DISTRICT AGRICULTURAL ASSOCIATION

For the Year 1888,

Composed of the Counties of Siskiyou, Shasta, and Trinity.

OFFICERS OF THE ASSOCIATION.

WILLIAM McCONNELL (died during second day of the fair) President.
DIRECTOR JAMES VANCE chosen to fill vacancy as President.
CLARENCE S. SMITH Secretary.
MAURICE RENNER Treasurer.

DIRECTORS.

WILLIAM McCONNELL Yreka, Siskiyou County.
JAMES VANCE Yreka, Siskiyou County.
JOHN V. BROWN Yreka, Siskiyou County.
S. MAGOFFEY Yreka, Siskiyou County.
L. SWAN Yreka, Siskiyou County.
JOHN T. MOXLEY Oro Fino, Siskiyou County.
FRED. ZARLE Weaverville, Trinity County.
E. A. REID Redding, Shasta County.

REPORT.

YREKA, December 31, 1888.

To the honorable the State Board of Agriculture:

GENTLEMEN: The Directors of the Tenth District Agricultural Association submit this, their report of the transactions of said association, for the year ending this date.

CLARENCE S. SMITH, Secretary.

RECEIPTS AND EXPENDITURES.

Receipts.

January 1—Balance cash on hand.....	\$501 86	
February 12—Contra credit: Paid M. Renner's note and interest due.....	\$422 90	
February 12—Contra credit: Paid additional bills, amounting to	80 02	
	<u>502 92</u>	
Balance overdraft		\$1 06
March 15—Borrowed from Siskiyou Agricultural Society.....	\$135 00	
March 15—Balance in treasury.....	133 94	
September 28—Received from sale of privileges.....	200 00	
September 29—Nomination fees	265 00	
October 2 to 6—Final entry fees	540 00	
October 2 to 6—Entry fees on stock	68 00	
October 2 to 6—Subscription.....	375 00	
October 2 to 6—Gate receipts	415 00	
October 2 to 6—Bar receipts	484 00	
October 2 to 6—Grand stand receipts	37 00	
October 2 to 6—Pavilion door receipts	42 00	
October 2 to 6—Pavilion badges	27 50	
October 2 to 6—Membership badges	230 00	
October 2 to 6—Percentage on pools.....	141 50	
October 2 to 6—Wagon licenses.....	55 00	
October 2 to 6—Third money, Races No. 7 and 9.....	25 00	
October 2 to 6—Sundry resources.....	21 00	
December 10—State warrant.....	1,000 00	
		<u>4,059 94</u>

Expenditures.

October 3 to 6—Paid purses to the amount of.....	\$1,975 00	
October 6 to 31—Paid bills to the amount of.....	853 40	
October 31—Paid for printing and advertising.....	136 80	
October 6 to 31—Returned entry fees.....	78 00	
December 10—Paid additional bills to the amount of	198 80	
December 10—Paid premiums to the amount of	840 00	
December 10—Paid Secretary's salary	75 00	
	<u>\$4,157 00</u>	
Total expenditures		\$4,157 00
Total receipts		<u>4,059 94</u>
Balance overdrawn, due Treasurer		\$97 06
Amount due Siskiyou Agricultural Society.....		133 94
Total indebtedness		<u>\$231 00</u>

EXHIBITS AT THE FAIR—1888.

FIRST DEPARTMENT.

Name of Animal.	Owner.	Address.
CLASS II—GRADED HORSES.		
Prince, best two-year old stallion	J. Fairchilds	Butte Creek.
CLASS IV—DRAFT HORSES.		
Comet, best stallion	Randle & Cox	Yreka.
Bruce, best stallion	J. Fairchilds	Butte Creek.
Grant, best stallion	James Bryant	Fort Jones.
Queen, best mare	Frock Bros.	Yreka.
Maud, best mare	Rader Bros.	Little Shasta.
CLASS V—ROADSTERS AND ROADSTER TEAMS.		
Admar, best roadster stallion	S. D. Prather	Montague.
Susie H, best roadster mare or gelding	L. Swan	Yreka.
Sisson Jim, best roadster gelding or mare	J. E. McDowell	Sisson.
Effie and Aggie, best roadster team	James Vance	Yreka.
Sleepy Kate, best roadster mare with three colts	L. Swan	Yreka.
Lenora, best roadster mare with three colts	S. D. Prather	Montague.
CLASS VII—SADDLE HORSES.		
Bob, best saddle horse	W. H. McNames	Little Shasta.
CLASS VIII—COLTS.		
Arguenot, best two-year old	Rader Bros.	Little Shasta.
Lochinvar, best two-year old	S. D. Prather	Montague.
Omar, best one-year old	S. D. Prather	Montague.
CLASS IX—JACKS AND MULES.		
Black Warrior, best jack	J. Fairchilds	Butte Creek.
Beck and Jule, best pair of mules	S. D. Prather	Montague.

SECOND DEPARTMENT.

Name of Animal.	Owner.	Address.
CLASS I—CATTLE—THOROUGHBREDS.		
Charger, best Aberdeen Angus bull	S. D. Prather	Montague.
Tonatal, best Holstein bull	H. L. Davis	Little Shasta.
Fanciful, best Holstein cow	H. L. Davis	Little Shasta.
Lily, best Jersey cow	A. Lee	Yreka.
Daisy, best Jersey cow	Frock Bros.	Yreka.
CLASS II—SWEEPSTAKES.		
Charger, best bull of any age or stock	S. D. Prather	Montague.
Tonatal, best bull of any age or stock	H. L. Davis	Little Shasta.
Fanciful, best cow of any age or stock	H. L. Davis	Little Shasta.
Rose, best cow of any age or stock	S. D. Prather	Montague.
Cherry, best cow of any age or stock	Frock Bros.	Yreka.
Cleveland, best calf of any age or stock	S. D. Prather	Montague.
Siskiyou, best calf of any age or stock	H. L. Davis	Little Shasta.

FIRST DEPARTMENT.

Name of Animal.	Exhibitor.	Address.	Award.
CLASS II—GRADED HORSES.			
Prince, stallion, two years old	J. A. Fairchild	Butte Creek	---\$25 00
CLASS IV—DRAFT HORSES.			
Grant, stallion	James Bryant	Fort Jones	---\$20 00
CLASS V—ROADSTERS AND ROADSTER TEAMS.			
Susie H.	L. Swan	Yreka	---\$20 00
CLASS VII—SADDLE HORSES.			
Bob	W. H. McNames ..	Little Shasta	---\$5 00
CLASS VIII—COLTS.			
Lochinvar, two years old	S. D. Prather	Montague	---\$10 00
Omar, one year old	S. D. Prather	Montague	---\$5 00
CLASS IX—JACKS AND MULES.			
Beck and Jule, pair of mules	S. D. Prather	Montague	---\$20 00
Black Warrior, jack	J. H. Fairchilds ..	Butte Creek	---\$35 00

SECOND DEPARTMENT.

Name of Animal.	Exhibitor.	Address.	Award.
CLASS I—CATTLE—THOROUGHBREDS.			
Charger, Aberdeen Angus bull	S. D. Prather	Montague	---\$25 00
Tonatal, Holstein bull	H. L. Davis	Little Shasta	---\$25 00
Fanciful, Holstein cow	H. L. Davis	Little Shasta	---\$15 00
Lily, Jersey cow	A. Lee	Yreka	---\$15 00
CLASS II—(OF ANY AGE OR STOCK)— SWEEPSTAKES.			
Tonatal, bull	H. L. Davis	Little Shasta	---\$25 00
Fanciful, cow	H. L. Davis	Little Shasta	---\$15 00
Cleveland, calf	S. D. Prather	Montague	---\$10 00

FIFTH DEPARTMENT.

Name of Animal.	Exhibitor.	Address.	Award.
POULTRY.			
Pair of Bantam chickens	J. E. Pashburg	Yreka	---\$2 00
Pair of Leghorn chickens	Bonner McConnell ..	Yreka	---\$2 00
Pair of Plymouth Rock chickens	Bonner McConnell ..	Yreka	---\$2 00

SIXTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I—MACHINERY, IMPLEMENTS, ETC.			
Best family carriage.....	Nehrbass & Harmon.....	Yreka.....	\$10 00
Best delivery wagon (special).....	Nehrbass & Harmon.....	Yreka.....	\$5 00
Best skeleton wagon (special).....	Nehrbass & Harmon.....	Yreka.....	\$5 00
Best top buggy (sold for \$300).....	Swan & Lemay.....	Yreka.....	\$8 00
Best farm wagon.....	Swan & Lemay.....	Yreka.....	\$8 00
CLASS II—MECHANICAL PRODUCTIONS.			
Best display of saddles.....	Henry Ringe.....	Yreka.....	\$8 00

SEVENTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
NEEDLEWORK, WAXWORK, CLOTHING, ETC.			
Best boys' suit, hand made.....	Mrs. B. T. Butler..	Montague.....	\$2 50
Best log cabin quilt.....	Mrs. B. T. Butler..	Montague.....	\$2 50
Best crazy sofa pillow.....	Miss Emma Davis..	Little Shasta.....	\$2 50
Best outlined pillow shams.....	Miss M. Pashburg..	Yreka.....	\$1 00
Best knit lace.....	Miss M. Pashburg..	Yreka.....	\$1 50
Best ottoman cover.....	Miss Emily Iunker..	Yreka.....	\$2 00
Best worsted sofa pillow.....	Miss Emily Iunker..	Yreka.....	\$2 00
Best fancy hand braiding.....	Miss Emily Iunker..	Yreka.....	\$2 00
Best hand tucking.....	Miss Dora Iunker..	Yreka.....	\$2 00
Best embroidery (toilet set).....	Miss Dora Iunker..	Yreka.....	\$2 00
Best picture (worsted work).....	Miss Dora Iunker..	Yreka.....	\$2 00
Best ornamental grasses.....	Miss Dora Iunker..	Yreka.....	\$2 00
Best cotton crochet.....	Mrs. C. H. Iunker, Jr.	Yreka.....	\$2 00
Best machine sewing.....	Mrs. C. H. Iunker, Jr.	Yreka.....	\$2 00
Best kensington work.....	Mrs. C. H. Iunker, Jr.	Yreka.....	\$2 00
Best linen embroidery (pillow sham).....	Mrs. C. H. Iunker, Jr.	Yreka.....	\$2 00
Best ornamental flowers.....	Mrs. C. H. Iunker, Jr.	Yreka.....	\$2 00
Best knit worsted lambrequin.....	Miss M. Pashburg..	Yreka.....	\$2 00
Best moss rug.....	Mrs. D. Merrick.....	Yreka.....	\$2 00
Best drawn rug.....	Miss Bertha Koster..	Hawkinsville.....	\$2 00
Best wax flowers.....	Miss Sophie Koster..	Hawkinsville.....	\$2 50
Best specimen wax work.....	Miss Sophie Koster..	Hawkinsville.....	\$2 50
Best display of millinery.....	Mrs. C. Iffland.....	Yreka.....	\$5 00
Best rag carpet, fifty yards.....	Mrs. M. Hetschell..	Yreka.....	\$2 50
Best fancy knit lace.....	Mrs. M. Hetschell..	Yreka.....	\$1 50
Best linen worsted bib.....	Miss M. Hetschell..	Yreka.....	\$2 00
Best cotton crochet.....	Miss E. Hetschell..	Yreka.....	\$1 50
Best braided saddle blanket.....	Miss G. Hetschell..	Yreka.....	\$2 00
Best worsted crochet.....	Miss M. Hetschell..	Yreka.....	\$2 00
Best zephyr crochet shawl.....	Miss Minnie Hoyt..	Little Shasta.....	\$2 50
Best hair work.....	Miss Minnie Hoyt..	Little Shasta.....	\$2 00
Best patchwork quilt.....	Miss Minnie Hoyt..	Little Shasta.....	\$2 50
Best needlework on plush.....	Miss Emily Iunker..	Yreka.....	\$2 50
Fine display of woolen goods*.....	Ashland Woolen Mill.....	Ashland, Oregon.....	.....

* Special recommendation, but not eligible.

EIGHTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
BREAD, BUTTER, CAKE, PRESERVES, JELLY, ETC.			
Best gooseberry jam	Miss May Griseza	Montague	\$1 50
Best fresh plums	Miss May Griseza	Montague	\$1 00
Best grape jelly	Mrs. Jas. Vance	Yreka	\$1 50
Best currant jelly	Miss Emma Davis	Little Shasta	\$1 50
Best Hungarian plum jelly	Miss Emma Davis	Little Shasta	\$1 50
Best apple jelly	Miss Emma Davis	Little Shasta	\$1 50
Best apricot jelly	Miss Emma Davis	Little Shasta	\$1 50
Best piccalilli	Miss Emma Davis	Little Shasta	\$1 00
Best Chili sauce	Miss Emma Davis	Little Shasta	\$1 00
Best grape catsup	Miss Emma Davis	Little Shasta	\$1 50
Best blackberry jam	Miss Emma Davis	Little Shasta	\$1 50
Best pepper sauce	Miss Emma Davis	Little Shasta	\$1 00
Best fresh apricots	Miss Emma Davis	Little Shasta	\$1 00
Best quince preserves	Miss Emma Davis	Little Shasta	\$1 00
Best pear preserves	Miss Emma Davis	Little Shasta	\$1 00
Best crabapple preserves	Miss Emma Davis	Little Shasta	\$1 50
Best wild plum preserves	Miss Emma Davis	Little Shasta	\$1 50
Best grape preserves	Miss Emma Davis	Little Shasta	\$1 50
Best dried German prunes	Mrs. H. L. Davis	Little Shasta	\$1 00
Best dried corn	Mrs. H. L. Davis	Little Shasta	\$1 00
Best dried almonds	Mrs. H. L. Davis	Little Shasta	\$1 00
Best dried apples	Mrs. H. L. Davis	Little Shasta	\$1 00
Best fresh Hungarian plums	Mrs. H. L. Davis	Little Shasta	\$1 00
Best fresh peaches	Mrs. C. Ifland	Yreka	\$1 00
Best dried apricots	Mrs. N. D. Julian	Shasta Valley	\$1 00
Best dried peaches	Mrs. N. D. Julian	Shasta Valley	\$1 00
Best dried nectarines	Mrs. N. D. Julian	Shasta Valley	\$1 00
Best dried pears	Mrs. N. D. Julian	Shasta Valley	\$1 00
Best quince jelly	Mrs. N. D. Julian	Shasta Valley	\$1 50
Best fresh cherries	Mrs. J. Pashburg	Yreka	\$1 00
Best fresh crabapples	Mrs. J. Pashburg	Yreka	\$1 00
Best fresh tomatoes	Mrs. J. Pashburg	Yreka	\$1 00
Best fresh gooseberries	Mrs. J. Pashburg	Yreka	\$1 00
Best fresh blackberries	Mrs. J. Pashburg	Yreka	\$1 00
Best fresh prunes	Mrs. J. Pashburg	Yreka	\$1 00
Best fresh wild plums	Mrs. J. Pashburg	Yreka	\$1 00
Best fresh peaches	Mrs. J. Pashburg	Yreka	\$1 00
Best fresh Hungarian plums	Mrs. J. Pashburg	Yreka	\$1 00
Best fresh wild cherries	Mrs. J. Pashburg	Yreka	\$1 00
Best tomato preserves	Mrs. J. Pashburg	Yreka	\$1 00
Best peach jelly	Mrs. J. Pashburg	Yreka	\$1 50
Best apricot preserves	Miss Dora Iunker	Yreka	\$1 00
Best blackberry jam	Miss Dora Iunker	Yreka	\$1 50
Best cherry jelly	Mrs. C. A. Iunker,		
	Jr.	Yreka	\$1 50
Best plum jelly	Mrs. M. Hetschell	Yreka	\$1 50
Best jelly cake	Mrs. M. Hetschell	Yreka	\$2 50
Best plain cake	Mrs. M. Hetschell	Yreka	\$2 50
Best chocolate cake	Mrs. M. Hetschell	Yreka	\$2 50
Best raised bread	Mrs. M. Hetschell	Yreka	\$2 50
Best peach preserves	Mrs. W. McConnell	Yreka	\$1 00
Best fresh cherries	Mrs. W. McConnell	Yreka	\$1 00
Best raspberry jelly	Mrs. W. McConnell	Yreka	\$1 50
Best blackberry jelly	Mrs. W. McConnell	Yreka	\$1 50
Best wild plum jelly	Mrs. W. McConnell	Yreka	\$1 50
Best raspberry jam	Mrs. W. McConnell	Yreka	\$1 50
Best pickle peaches	Mrs. W. McConnell	Yreka	\$1 00
Best crabapple jelly	Mrs. W. McConnell	Yreka	\$1 50
Best mangoes	Mrs. W. McConnell	Yreka	\$1 00
Best tomato catsup	Mrs. G. A. Nord-		
	heim	Yreka	\$1 00
Best pickled cucumbers	Miss Minnie Hoyt	Little Shasta	\$1 00

NINTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
JUVENILE—UNDER FIFTEEN YEARS OF AGE.			
Best hand sewing	Miss A. Coonrod ..	Little Shasta	\$2 50
Best hand knit skirt	Miss A. Coonrod ..	Little Shasta	\$2 50
Best specimen wood work	Willie Griseza	Little Shasta	\$2 00
Best honeycomb tidy	Willie Griseza	Little Shasta	\$1 00
Best bead work	Willie Griseza	Little Shasta	\$1 00
Best etching tidy	Miss Mable Vance ..	Yreka	\$1 50
Best etching scarf	Miss Julia Swan ..	Yreka	\$1 50
Best worsted work	Miss Julia Swan ..	Yreka	\$1 50
Best chenille embroidery	Miss Nellie Iunker ..	Yreka	\$1 50
Best shell work	Miss Nellie Iunker ..	Yreka	\$1 50
Best silk worsted work	Miss Nellie Iunker ..	Yreka	\$1 00
Best patchwork	Miss Nellie Iunker ..	Yreka	\$1 00
Best Java canvas tidy	Miss Nellie Iunker ..	Yreka	\$1 00
Best shade tidy	Miss D. Pashburg ..	Yreka	\$1 00
Best crochet lace	Miss D. Pashburg ..	Yreka	\$1 50
Best honeycomb canvas tidy	Miss E. Pashburg ..	Yreka	\$1 00
Best cotton crochet	Miss E. Pashburg ..	Yreka	\$1 00
Best cotton tidy	Miss E. Pashburg ..	Yreka	\$1 00
Best crochet collar	Miss M. Hetschell ..	Yreka	\$1 00
Best worsted crochet skirt	Miss M. Hetschell ..	Yreka	\$1 50
Best grape jelly	Miss Julia Swan ..	Yreka	\$1 50
Best blue plum jelly	Miss Julia Swan ..	Yreka	\$1 50
Best crabapple jelly	Miss Julia Swan ..	Yreka	\$1 50
Best green tomato pickles	Miss Julia Swan ..	Yreka	\$1 00
Best pickled onions	Miss D. Pashburg ..	Yreka	\$1 00
Best raised bread	Miss N. Iunker	Yreka	\$2 50
Best raised biscuit	Miss N. Iunker	Yreka	\$2 50
Best cocoanut cake	Miss D. Pashburg ..	Yreka	\$2 50
Best walnut cake	Miss E. Pashburg ..	Yreka	\$2 50
Best wild cherry butter	Miss E. Pashburg ..	Yreka	\$1 00
Best white grape jelly	Miss E. Pashburg ..	Yreka	\$1 50
Best blue plum jelly	Miss E. Pashburg ..	Yreka	\$1 50
Best oil painting on wood	Miss M. Iffland	Yreka	\$5 00
Best hand painting on china	Miss M. Iffland	Yreka	\$5 00
Best painted rice frame	Miss N. Iunker	Yreka	\$2 50
Best crystallized flowers	Miss N. Iunker	Yreka	\$2 50
Best oil plaque painting	Miss N. Iunker	Yreka	\$2 50
Best specimen of penmanship	Miss C. Hellschell (sixteen years)	Yreka	\$2 00
Best specimen of penmanship	Miss M. Hellschell (twelve years)	Yreka	\$2 00
Best specimen of penmanship	Miss D. Pashburg (ten years)	Yreka	\$2 00
Best specimen of penmanship	Master P. Harmon (thirteen years)	Yreka	\$2 00
Best specimen of penmanship	Master H. Merrick (eleven years)	Yreka	\$2 00

TENTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
AGRICULTURAL PRODUCTS.			
Best barley, fifty pounds	H. L. Davis	Little Shasta	\$5 00
Best wheat, fifty pounds	C. Griseza	Little Shasta	\$5 00
Best cheese, fifty pounds	J. H. Wheimore	Etna Mills	\$5 00
Best flour, fifty pounds	Vance & Walbridge ..	Yreka	\$5 00
Best chestnuts	G. W. Julian	Shasta Valley	\$1 50
Best table beets	Antone Foster	Hawkinsville	\$2 50
Best table carrots	Antone Foster	Hawkinsville	\$2 50
Best cabbage	Antone Foster	Hawkinsville	\$2 50
Best peerless potatoes	Antone Foster	Hawkinsville	\$5 00

TENTH DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Best sweet potatoes	Antone Foster	Hawkinsville	\$2 50
Best display of vegetables	R. E. Rader	Little Shasta	\$5 00
Best cucumbers	Mrs. M. Lewis	Montague	\$2 00
Best mammoth squash	Mrs. M. Lewis	Montague	\$2 00
Best watermelons	Mrs. M. Lewis	Montague	\$2 00
Best three varieties of potatoes	Perry Hoyt	Little Shasta	\$2 50
Best display of squash	Perry Hoyt	Little Shasta	\$2 50

ELEVENTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
WINES, ETC.; GREEN FRUIT, ETC.			
Best display of fruit	D. N. Julian	Shasta Valley	\$5 00
Best ten varieties of apples	D. N. Julian	Shasta Valley	\$5 00
Best variety of pears	Henry Scheld	Yreka	\$2 50
Best variety of plums	Henry Scheld	Yreka	\$2 50
Best three varieties of apples	Sam. Jackson	Edgewood	\$3 00
Best display of peaches	Perry Hoyt	Little Shasta	\$2 50
Best currant wine	Mrs. G. A. Nordheim	Yreka	\$2 50

TWELFTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
FINE ARTS.			
Best charcoal drawing	Miss Aggie Vance	Yreka	\$5 00
Best pencil drawing	Miss Aggie Vance	Yreka	\$5 00
Best oil painting	Miss Aggie Vance	Yreka	\$10 00
Best tinted photographs	Miss Clara Hetschell	Yreka	\$2 50

FLORAL DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
Best cut flowers (first premium)	Miss Lena Fried	Yreka	\$2 50
Best cut flowers (second premium)	Mrs. D. N. Julian	Shasta Valley	\$1 00
Best house plant (first premium)	Mrs. C. A. Junker, Jr.	Yreka	\$5 00
Best house plant (second premium)	Mrs. D. Merrick	Yreka	\$2 50

SPEED PROGRAMME.

WEDNESDAY, OCTOBER 3, 1888.

RACE NO. 1—RUNNING.

Purse, one hundred dollars. First horse to receive seventy per cent; second horse to receive twenty per cent; third horse to receive ten per cent of purse. Entrance, ten per cent of purse. Nominations close Saturday, September 29, 1888. The conditions of all the races of this meeting are the same, except specials. Half mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Little Cap, b. g.	J. W. Dowell.....	.....
Bones, s. g.	Ed. Lee.....	Alturas.
Bessie Burk, b. m.	Charles Howard	Fort Jones.
Minnie R, b. m.	E. Flitner.....	Yreka.

SUMMARY.

Little Cap.....	0	1	1
Bessie Burk.....	0	2	3
Bones.....	3	4	4
Minnie R.....	4	3	2

Time—0:50; 0:51; 0:50.

RACE NO. 2—TROTTING.

3:00 Class. Purse, one hundred and fifty dollars. Mile heats; two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Lady W, br. m.	J. Sutherland.....	Yreka.
Stemwinder, b. g.	L. Swan.....	Yreka.
Queen, b. m.	Wm. Pinnell.....	Fort Jones.

SUMMARY.

Lady W.....	1
Stemwinder.....	dis.

Time—2:33½.

RACE NO. 3—RUNNING.

Sweepstake. Special for saddle horses. Entrance, free. Purse, twenty-five dollars. Half mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Bob, b. g.	W. H. McNames.....	Little Shasta.
Webfoot, b. s.	H. De Witt.....	Little Shasta.
Satin, br. m.	C. R. Kinyon.....	Little Shasta.

SUMMARY.

Satin	1
Bob	2
Webfoot	3

Time—0:55.

THURSDAY, OCTOBER 4, 1888.

RACE No. 4—RUNNING.

Purse, two hundred dollars. One mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Menlo, blk. g.	M. McCrimmon	Lincoln.
Jubilee, s. g.	Joe Stephens	Etna Mills.
Bessie Burk	Charles Howard	Fort Jones.

SUMMARY.

Bessie Burk	1	2	2
Menlo	2	1	1
Jubilee	3	3	stabled.

Time—1:48 $\frac{3}{4}$; 1:51; 1:54 $\frac{3}{4}$.

Bessie Burk was very lame, or she would have won the second heat and race.

RACE No. 5—TROTTING.

2:35 Class. Purse, two hundred and fifty dollars. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Bird, b. m.	W. R. Merrill	Willows.
Altena, blk. m.	L. Swan	Yreka.
Lady Beech, b. m.	J. Sutherland	Yreka.
Zelophone, b. s.	J. C. Evans	Yreka.

SUMMARY.

Altena	1	1	0	1
Bird	3	2	0	3
Zelophone	2	3	3	2
Lady Beech	4	4	4	4

Time—2:33; 2:32; 2:32; 2:34.

FRIDAY, OCTOBER 5, 1888.

RACE No. 6—RUNNING.

For two-year olds. Purse, one hundred and fifty dollars. Three fourths of a mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Bluejay, r. m.	S. D. Prather	Montague.
Arch, b. g.	S. D. Prather	Montague.
Wild Robin, s. s.	Wm. Purnell	Fort Jones.
Jamboree, b. s.	Charles Howard	Fort Jones.

SUMMARY

Wild Robin	1
Jamboree	2
Arch	3
Bluejay	4

Time—1:25.

RACE NO. 7—RUNNING.

Special purse, one hundred dollars. Three eighths of a mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Little Cap, b. g.	J. W. Dowell .....	.....
Barney G, b. g.	U. S. Gregory	Ione.
Bones, s. g.	Ed. Lee	Alturas.
Rubie, b. m.	Randle & Cox	Yreka.

SUMMARY.

Barney G	1	1
Little Cap	2	2
Bones	3	4
Rubie	4	3

Time—0:36 $\frac{3}{4}$; 0:38.

RACE NO. 8—TROTTING.

Free for all four-year olds owned in the district prior to May 1, 1888. Purse, one hundred and fifty dollars. Mile heats; two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Susie H, b. m.	L. Swan	Yreka.
Effie V, b. m.	A. S. Mounte	Yreka.
Dick, g. g.	A. D. Richards	Yreka.

SUMMARY.

Susie H	1	1
Effie V	2	2

Time—2:53 $\frac{1}{2}$; 2:51.

RACE NO. 9—RUNNING.

Special purse, fifty dollars. One fourth mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Barney G, b. g.	U. S. Gregory	Ione.
Frenchy, s. g.	Ed. Lee	Alturas.
Little Cap, b. g.	J. W. Dowell .....	.....

SUMMARY.

Barney G	1
Frenchy	2
Little Cap	3

Time—0:23 $\frac{1}{4}$.

SATURDAY, OCTOBER 6, 1888.

RACE No. 10—RUNNING.

Purse, one hundred dollars. Mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Minnie R, b. m.	E. Flitner	Yreka.
Jubilee, s. g.	Joseph Stephens	Etna.
Menlo, blk. g.	M. McCrimmon	Lincoln.

SUMMARY.

Minnie R	1
Jubilee	2

Time—1:50 $\frac{3}{4}$.

RACE No. 11—TROTTING.

2:30 Class. Purse, six hundred dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Bird, b. m.	W. R. Merrill	Willows.
Lady W, br. m.	Jas. Sutherland	Yreka.
Lohengrin, b. g.	J. W. Dowell	Yreka.
Altena, blk. m.	L. Swan	Yreka.

SUMMARY.

Bird	1	1	3	2	2
Lady W	2	2	2	dr.	
Altena	3	3	1	1	1
Lohengrin	dis.				

Time—2:36; 2:31; 2:34; 2:35; 2:37.

RACE No. 12—RUNNING.

Purse, fifty dollars. Half mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Little Cap, b. g.	J. W. Dowell	
Joe Hooker, s. g.	Ed. Lee	Alturas.
Barney G, b. g.	U. S. Gregory	Ione.

SUMMARY.

Little Cap	1
Barney G	2
Joe Hooker	3

Time, 0:49.

TRANSACTIONS

OF THE

ELEVENTH DISTRICT AGRICULTURAL ASSOCIATION

For the Year 1888,

Composed of the Counties of Plumas, Sierra, Lassen, and Modoc.

REPORT.

SUSANVILLE, December 27, 1888.

To the honorable the State Board of Agriculture:

GENTLEMEN: The Directors of the Eleventh District Agricultural Association submit this, their report of the transactions of said association, for the year ending this date.

R. L. DAVIS, Secretary.

RECEIPTS AND EXPENDITURES.

Receipts.

Balance on hand, year 1887	\$1,925 74	
Fair subscriptions	6,050 00	
Gate and door money	2,431 75	
Hack license	51 00	
Entrance to sweepstakes	26 00	
Entrance to races	3,185 00	
Back entrance, Rocket, due District No. 2	77 55	
Deposit Chas. Sherman	50 00	
Back entrance, Overland Pat.	60 00	
Back entrance, Wallace G	136 80	
Amount State warrant	1,500 00	
		<u>\$15,493 84</u>

Expenditures.

Expense of delegate to Convention of Associations at Sacramento	\$50 00	
Expense of Directors' meeting, May 5, 1888	96 00	
Membership fee National Association	56 30	
Warrant in favor Jas. Dyson, premiums 1885	85 00	
Expense of fair posters	81 35	
Expense of August meeting of Board	140 00	
Office expense, freight, postage, etc.	42 10	
Paid purses	7,819 00	
Paid premiums	2,675 00	
Paid music	300 00	
Paid materials for and erection of buildings on grounds	656 00	
Paid ball supper	130 50	
Paid incidentals (employés, laborers, etc., during fair)	1,892 33	
Paid deposit Dan. Dennison (Rocket), sent to Hartford	77 55	
Deposit Chas. Sherman returned	50 00	
Paid Thos. Keating car fare, two horses (Reno to Susanville)	20 00	
Balance on hand	1,322 71	
		<u>\$15,493 84</u>

PREMIUMS AWARDED—1888.

FIRST DEPARTMENT.

Name of Animal.	Exhibitor.	Address.	Award.
CLASS "A"—THOROUGHERED HORSES— STALLIONS.			
Cousin Vic, three years old or over.....	Jas. Dyson	Summit	\$30 00
Collingwood, one year old.....	Jas. Dyson	Summit	\$15 00
Jo D, suckling colt	Jas. Dyson	Summit	\$10 00
MARES.			
Lucy, three years old or over.....	Jas. Dyson	Summit	\$25 00
CLASS "B"—DRAFT HORSES—PERCHERON— STALLIONS.			
Austin, three years old or over	I. C. Mapes.....	Janesville	\$30 00
DRAFT HORSES—GENERAL—STALLIONS.			
Young Royalty, three years old or over ..	M. Misenheimer.....	Taylorville	\$20 00
Madere, three years old or over	C. R. Suggett	Eagleville	\$30 00
Frank, one year old	L. E. Winchester.....	Susanville	\$20 00
Dick, suckling colt	A. E. De Forest	Susanville	\$10 00
MARES.			
Lucy, three years old or over.....	L. E. Winchester.....	Susanville	\$25 00
Daisy, three years old or over	I. C. Mapes.....	Janesville	\$20 00
Dolly, two years old	J. M. Cadle	Greenville	\$20 00
Lucy and colt	L. E. Winchester.....	Susanville	\$20 00
Jule and four colts	A. E. De Forest	Susanville	\$25 00
Maggie, suckling colt.....	S. S. Bass.....	Janesville	\$10 00
CLASS "C"—HORSES OF ALL WORK— STALLIONS.			
Jack, three years old or over	E. Van Laan	Madeline	\$30 00
George Patchen, three years old or over ..	G. W. Long	Susanville	\$15 00
Gilbert, two years old	John Hulsman	Susanville	\$20 00
Mac, two years old	Sam. Bond	Janesville	\$10 00
French Boy, two years old (special prem.)	A. Babcock	Bieber	\$10 00
Hornet, one year old	E. P. Smith	Taylorville	\$20 00
Alcantara, one year old	J. O. Hember.....	Janesville	\$10 00
MARES.			
Queen, three years old or over	J. P. Sharp	Janesville	\$25 00
Nellie, three years old or over	Pat Bogin	Susanville	\$20 00
Lucy, two years old	Thos. Dennin	Mt. Meadows	\$15 00
Lady Maxwell, two years old	Ike Hall	Greenville	\$10 00
Lizzie K and suckling colt	W. P. Hall	Susanville	\$20 00
Lizzie K and two colts	W. P. Hall	Susanville	\$30 00
Mariah, one year old	J. M. Cadle	Greenville	\$10 00
Kate, suckling colt	C. Odette	Susanville	\$10 00
CLASS "D"—ROADSTERS—STALLIONS AND GELDINGS.			
Boylston, stallion, three years old or over ..	A. L. Tunison	Susanville	\$25 00
Doc Mason, stallion, three yrs. old or over ..	W. J. Seagraves	Susanville	\$15 00
Senator, gelding, three years old or over ..	E. P. Smith	Taylorville	\$25 00
Billy, gelding, three years old or over	K. McLeod	Greenville	\$15 00
Dan and Mc, span of geldings	Wm. Hardgrave	Taylorville	\$25 00
Span of roadsters	A. E. De Forest	Susanville	\$15 00
MARES.			
Bird, three years old or over	J. S. Carter	Crescent	\$25 00
Fanny, three years old or over	J. N. Barry	Janesville	\$15 00
Duchess, two years old	D. W. McKenzie	Greenville	\$25 00

TRANSACTIONS OF THE
FIRST DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
CLASS "E"—SWEEPSTAKES—STALLIONS.			
Madere, three years old or over	C. R. Suggett.....	Eagleville	\$40 00
CLASS "S"—JACKS.			
Cleveland, three years old or over	R. H. Blunkall	Cana	\$20 00
CLASS "T"—JENNIES.			
Lassen Beauty, three years old or over ..	W. R. Harrison	Susanville.....	\$15 00
CLASS "V"—MULES.			
Tobe, three years old or over	W. M. Cain.....	Susanville.....	Diploma.
CLASS "U"—BEST PULLING TEAMS.			
Span of geldings	J. C. Wemple.....	Milford	\$25 00
Span of mares	A. E. De Forest	Susanville.....	\$15 00
CLASS "F"—JERSEY CATTLE—BULLS.			
Alameda 4th, three years old or over....	W. P. Hall	Susanville	\$30 00
Alameda 5th, calf	W. P. Hall	Susanville.....	\$5 00
COWS.			
Belle, three years old or over	W. P. Hall	Susanville.....	\$20 00
Jennie, three years old or over	W. P. Hall	Susanville.....	\$15 00
Bess, two years old	W. P. Hall	Susanville.....	\$15 00
Nellie, two years old	W. P. Hall	Susanville.....	\$10 00
Nellie 1st, calf	W. P. Hall	Susanville.....	\$5 00
CLASS "G"—DURHAM CATTLE—BULLS.			
Binmetallist, three years old or over	Moses Chase	Red Clover.....	\$30 00
King David's Plumas, three years old or over ..	I. Hall	Greenville.....	\$20 00
Jackson, two years old	J. W. Hasselkus	Susanville.....	\$25 00
CLASS "K"—GRADED CATTLE—BULLS.			
Prince, three years old or over	Thomas Watson	Susanville.....	\$20 00
Murro, three years old or over	S. S. Bass	Janessville	\$15 00
Blaine, two years old	Thomas Dennin	Mt. Meadows	\$10 00
Stonewall, one year old	W. M. Cain.....	Susanville.....	\$10 00
Golddust, one year old	I. Hall	Greenville.....	\$5 00
Prince, bull calf	Moses Chase	Red Clover.....	\$5 00
Harrison, bull calf	I. Hall	Greenville.....	\$2 50
COWS.			
Miss Willard, three years old or over....	I. Hall	Greenville.....	\$20 00
Cherry, three years old or over	J. W. Glascock	Susanville.....	\$15 00
Queen, two years old	I. Hall	Greenville.....	\$15 00
Blossom, two years old	I. Hall	Greenville.....	\$10 00
White Lillie, one year old	I. Hall	Greenville.....	\$10 00
Rose, one year old	I. Hall	Greenville.....	\$5 00
Dora, calf	I. Hall	Greenville.....	\$5 00
Miss Cleveland, calf	I. Hall	Greenville.....	\$2 50
CLASS "L"—SWEEPSTAKES—BULLS.			
Binmetallist	Moses Chase	Red Clover.....	\$40 00
COWS.			
Miss Willard	I. Hall	Greenville.....	Diploma.
CLASS "M"—SHEEP.			
Dick, ram	J. R. Perkins.....	Susanville.....	\$10 00
Sally, ewe	J. R. Perkins.....	Susanville.....	\$10 00
Pen of four sheep	Chas. Lawson	Susanville.....	\$10 00
CLASS "N"—SWINE.			
John, Berkshire boar	J. W. Glascock	Susanville.....	\$15 00
Bess, Berkshire sow	J. W. Glascock	Susanville.....	\$10 00
Pen of five Berkshire pigs	J. W. Glascock	Susanville.....	\$10 00
Bess, Essex sow	C. E. Hart	Susanville.....	\$10 00
Billy, Poland-China boar	J. R. Cain	Susanville.....	\$15 00
Susie, Poland-China sow	J. R. Cain	Susanville.....	\$5 00

FIRST DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
Bess, Poland-China sow	W. P. Hall	Susanville	..\$10 00
Pen of three Poland-China pigs, nine weeks old	W. P. Hall	Susanville	..\$10 00
Pen of five Poland-China pigs, five weeks old	J. R. Cain	Susanville	..\$5 00
Joe, Duroc boar	W. P. Hall	Susanville	..\$15 00
Jack, Duroc boar	W. P. Hall	Susanville	..\$10 00
Eliza, Duroc sow	W. P. Hall	Susanville	..\$10 00
Jane, Duroc sow, and seven pigs	W. P. Hall	Susanville	..\$10 00
Pen of seven Duroc pigs	W. P. Hall	Susanville	..\$5 00
Pen of five Duroc pigs	W. P. Hall	Susanville	..\$10 00
SWEESTAKES—BOARS.			
John	J. W. Glascock	Susanville	..\$20 00
CLASS "O"—POULTRY.			
Trio of Plymouth Rocks	Mrs. W. P. Hall	Susanville	..\$5 00
Trio of Houdans	Mrs. W. P. Hall	Susanville	..\$5 00
Trio of Spanish	Mrs. W. P. Hall	Susanville	..\$5 00
Trio of White Leghorns	Mrs. W. P. Hall	Susanville	..\$5 00
Trio of Wyandottes	Mrs. W. P. Hall	Susanville	..\$5 00
Trio of Buff Cochins	Mrs. W. P. Hall	Susanville	..\$5 00
Trio of Bronze turkeys	Mrs. W. P. Hall	Susanville	..\$5 00
Trio of Brown Leghorns	Jerry Tyler	Millford	..\$5 00
Trio of Langhans	Jerry Tyler	Millford	..\$5 00
Trio of Bantams	C. W. Burnie	Susanville	..\$5 00
Coop of four doves	Bertie Myers	Susanville	..\$2 00
Best exhibit of fowls	Mrs. W. P. Hall	Susanville	..\$10 00

SECOND DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I—HOUSEHOLD FABRICS.			
Patchwork quilt, silk	Mrs. C. E. Hall	Susanville	..\$3 50
Pillow shams	Mrs. C. E. Hall	Susanville	..\$1 50
Crochet slippers	Miss Amy McNealy	Greenville	..\$2 00
Pillow cases	Miss Amy McNealy	Greenville	..\$2 00
Knitted slippers	Miss Jessie McBeth	Prattville	..\$1 50
Gents' shirt	Mrs. John McBeth	Prattville	..\$2 50
Boys' shirt	Mrs. W. Ravenscroft	Susanville	..\$3 00
Hand-made trimming	Mrs. W. Ravenscroft	Susanville	..\$1 00
Fancy apron	Mrs. W. Ravenscroft	Susanville	..\$1 00
Underclothes, rickrack trimming	Mrs. W. Ravenscroft	Susanville	..\$2 00
Irish charm quilt	Mrs. Dan. Cramer	Susanville	..\$4 00
Cheese cloth comfort	Mrs. Dan. Cramer	Susanville	..\$2 50
Worsted tidy	Mrs. A. Otto	Susanville	..\$2 00
Gents' shirt	Mrs. John Cahlan	Susanville	..\$1 00
Drawn rug	Mrs. John Cahlan	Susanville	..\$3 00
Stocking bag	Miss A. VanNorden	Susanville	..\$1 50
Braided rug	Mrs. I. Hall	Greenville	..\$1 50
Silk crib quilt	Mrs. Mary Hall	Susanville	..\$3 50
Driving gloves, hand-made	Mrs. H. Snyder	Susanville	..\$1 50
Set of underwear	Miss G. Phillips	Susanville	..\$2 00
Pair of pillow slips	Miss G. Phillips	Susanville	..\$2 00
Hand-made trimming skirt	Miss G. Phillips	Susanville	..\$2 00
Two pair of pillow cases	Miss G. Phillips	Susanville	..\$1 00
Apron, hand-make trimming	Mrs. McCrimmon	Susanville	..\$1 50
Comfort, white canton	Mrs. Longanecker	Susanville	..\$2 50
Tufted quilt	Mrs. Longanecker	Susanville	..\$2 50
Rag carpet	Mrs. E. Lysinger	Susanville	..\$2 00

SECOND DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Bed comforter.....	Mrs. E. Lysinger..	Susanville	\$2 00
Knitted vest.....	Mrs. E. Lysinger..	Susanville	\$1 50
Crazy quilt.....	Miss Addie Rose..	Susanville	\$5 00
Knit comfort.....	Mrs. J. McCullum..	Susanville	\$2 00
Knit rug.....	Mrs. H. Sifford ..	Susanville	\$3 00
Home-made soap.....	Mrs. H. Sifford ..	Susanville	\$1 50
Cotton tidy.....	Mrs. J. R. Bailey ..	Janesville	\$2 00
Patchwork quilt.....	Mrs. L. Woodstock ..	Susanville	\$2 00
Knit slippers.....	Mrs. E. Hasselkus..	Greenville	\$1 50
Crib quilt, knit.....	Mrs. Frank Datla..	Janesville	\$2 00
Crochet shawl.....	Mrs. Frank Datla..	Janesville	\$2 50
Child's dress, crochet.....	Mrs. L. Lane	Susanville	\$1 50
Pair of knit socks.....	Mrs. L. W. Bunnell ..	Prattville	\$1 00
Knit bedspread.....	Mrs. L. W. Bunnell ..	Prattville	\$4 00
Knit skirt.....	Mrs. L. Sanders ..	Susanville	\$1 50
Patchwork quilt, silk.....	Mrs. Day.....	Susanville	\$7 00
Fancy rug.....	Mrs. Day.....	Susanville	\$3 00
Patchwork quilt.....	Miss Addie Rose..	Susanville	\$4 00
Ten yards of rag carpet.....	Mrs. W. Brashear..	Susanville	\$5 00
Slumber robe.....	Mrs. L. W. Skinner ..	Milford	\$2 00
Button rug.....	Mrs. J. Hasselkus..	Susanville	\$3 00
Fancy knit stockings.....	Mrs. J. Lovell.....	Greenville	\$1 50
Rib stockings.....	Mrs. J. Lovell.....	Greenville	\$1 00
Crochet shawl.....	Mrs. A. Burnie ..	Susanville	\$2 50
Ladies' underwear.....	Mrs. Wm. Greehn..	Susanville	\$1 00
Crazy quilt.....	Mrs. M. Williams ..	Susanville	\$7 00
Drawn rug.....	Mrs. John Cahlan..	Susanville	\$3 00
Hemstitching.....	Mrs. B. F. Chandler ..	Quincy	\$3 00
Combing towel.....	Mrs. J. Broadwell..	Janesville	\$2 00
Undershirt trimming.....	Mrs. O. L. Carter ..	Susanville	\$2 00
Pair of knitted slippers.....	Miss Jessie McBeth ..	Prattville	\$1 00
Child's dress, crochet.....	Mrs. L. Lane	Susanville	\$2 00
Tidy.....	Miss L. Hulsman..	Susanville	\$1 00
Wreath.....	Mrs. Belle Tremain ..	Susanville	\$2 00
Worsted wreath.....	Mrs. Wm. Greehn..	Susanville	\$2 00
Wax work.....	Mrs. M. Williams ..	Susanville	\$2 00
Flowercross.....	Mrs. S. J. Odette..	Susanville	\$1 50
Agricultural wreath.....	Mrs. Day.....	Susanville	\$2 00
Tissue paper flowers.....	Mrs. H. Bennett..	Susanville	\$1 00
Rustic flower stand.....	Mrs. C. J. Kelley ..	Susanville	\$3 00
Feather wreath.....	Mrs. J. Snell.....	Fall River	\$2 00
Sea moss basket.....	Mrs. A. Otto.....	Susanville	\$2 00
Rickrack trimming.....	Mrs. C. E. Hall ..	Susanville	\$2 00
Infant's knit shirt.....	Mrs. C. E. Hall ..	Susanville	\$2 00
Infant's knit drawers.....	Mrs. C. E. Hall ..	Susanville	\$2 00
Embroidered toilet set.....	Mrs. C. E. Hall ..	Susanville	\$2 00
Infant's sack.....	Mrs. L. Kaulback ..	Greenville	\$2 00
Child's dress.....	Mrs. L. Kaulback ..	Greenville	\$1 50
Fancy apron.....	Mrs. M. Leavitt ..	Greenville	\$1 50
Tidy, applique work.....	Mrs. M. Leavitt ..	Greenville	\$1 50
Skirt flounce (special).....	Mrs. M. Leavitt ..	Greenville	\$2 00
Banner, kensington embroidery.....	Mrs. Clark Lee ..	Prattville	\$5 00
Spanish drawn work.....	Miss A. McNealy ..	Greenville	\$1 50
Feather stitching.....	Miss A. McNealy ..	Greenville	\$2 00
Toilet cushion.....	Mrs. T. Roseberry ..	Adin	\$1 50
Table scarf.....	Mrs. T. Roseberry ..	Adin	\$2 00
Wall banner.....	Mrs. T. Roseberry ..	Adin	\$2 00
Bead work.....	Miss Lizzie Doyle ..	Milford	\$2 00
Display of cloaks.....	Mrs. J. D. Compton ..	Greenville	Sp. ment.
Fancy chair cushion.....	Mrs. M. Williams ..	Susanville	\$2 00
Embroidered chenille jacket.....	Mrs. M. Williams ..	Susanville	\$2 50
Antique trimming.....	Miss L. McCloskey ..	Susanville	\$2 00
Tatting.....	Mrs. R. F. Moody ..	Susanville	\$2 00
Knit collar.....	Mrs. G. DeForest ..	Susanville	\$1 50
Macrame work.....	Mrs. John Cahlan..	Susanville	\$1 50
Key rack.....	Mrs. John Cahlan..	Susanville	\$1 00
Brush holder.....	Mrs. John Cahlan..	Susanville	\$1 00
Table applique work.....	Mrs. John Cahlan..	Susanville	\$3 00
Worsted knitting.....	Mrs. I. Hall.....	Greenville	\$1 00
Work basket.....	Mrs. H. Snyder.....	Susanville	\$1 50

SECOND DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Spectacle case	Mrs. H. Snyder	Susanville	\$1 00
Tidies, outline	Miss G. Phillips	Susanville	\$2 00
Toilet work, drawn	Miss G. Phillips	Susanville	\$3 00
Table set, crochet	Miss G. Phillips	Susanville	\$2 00
Hanging basket	Mrs. Fred. Kahler	Johnstonville	\$2 00
Towel	Mrs. J. Broadwell	Janesville	\$1 00
Sea moss wreath	Mrs. H. Meylert	Janesville	
Shoe and slipper case	Mrs. J. Broadwell	Janesville	\$1 50
Pillow shams	Mrs. E. Lysinger	Susanville	\$1 50
Graded pillow shams	Mrs. Day	Susanville	\$2 00
Tufted chair cushion	Mrs. Day	Susanville	\$1 50
Outline tidy	Mrs. J. McCallum	Johnstonville	\$1 50
Crochet collar	Mrs. L. Woodstock	Susanville	\$1 50
Tatting collar	Mrs. L. Woodstock	Susanville	\$1 00
Table scarf	Mrs. W. Brashear	Susanville	\$2 00
Lamp mat	Mrs. J. C. Wemple	Milford	\$2 00
Card receiver	Mrs. Longanecker	Johnstonville	\$1 00
Beaded panel	Miss N. Perkins	Susanville	\$1 00
Scarf, applique	Mrs. L. W. Skinner	Milford	\$3 00
Handkerchief case	Miss C. Hoffman	Buntingville	\$2 00
Embroidered tidy	Miss C. Hoffman	Buntingville	\$2 00
Crochet tidy	Mrs. S. Hoffman	Buntingville	\$1 00
Embroidered tablespread	Miss C. Hoffman	Buntingville	\$3 00
Crochet work basket	Mrs. O. L. Carter	Susanville	\$2 00
Worsted work on cardboard	Mrs. O. L. Carter	Susanville	\$1 00
Crochet lambrequin	Mrs. O. L. Carter	Susanville	\$2 00
Knit shoulder cape	Mrs. O. L. Carter	Susanville	\$1 50
Wool tidy, crochet	Mrs. O. L. Carter	Susanville	\$1 50
Crochet shawl	Mrs. O. L. Carter	Susanville	\$2 50
Undershirt trimming	Mrs. O. L. Carter	Susanville	\$1 00
Fancy pillow shams	Mrs. E. Hasselkus	Greenville	\$2 00
Macrame crochet tidy	Mrs. E. Hasselkus	Greenville	\$1 50
Afghan, crochet	Mrs. E. Hasselkus	Greenville	\$2 00
Table mats, crochet	Mrs. H. N. Skadan	Susanville	\$1 00
Embroidered saddle blanket	Mrs. H. N. Skadan	Susanville	\$2 00
Outline splasher	Mrs. H. N. Skadan	Susanville	\$1 00
Knit skirt	Mrs. R. L. Davis	Susanville	\$2 00
Daisy tidy	Mrs. R. L. Davis	Susanville	\$2 00
Outline splasher	Mrs. R. L. Davis	Susanville	\$1 00
Cotton tidy, crochet	Mrs. R. L. Davis	Susanville	\$2 00
Child's toboggan	Mrs. R. L. Davis	Susanville	\$2 00
Knit bedspread	Miss L. Hulsman	Susanville	\$4 00
Embroidered toilet cushion	Mrs. R. L. Davis	Susanville	\$1 00
Sofa pillow	Mrs. R. L. Davis	Susanville	\$1 00
Outline pillow shams	Mrs. D. C. Hyer	Susanville	\$2 00
Child's hood	Mrs. J. O. Hemler	Buntingville	\$2 00
Arrasene table scarf	Mrs. M. Marsteller	Susanville	\$3 00
Silk embroidered wrap	Mrs. M. Marsteller	Susanville	\$2 00
Infant's flannel skirt	Mrs. M. Marsteller	Susanville	\$2 00
Sofa cushion	Miss Ida Freeman	Susanville	\$2 00
Outline bureau scarf	Mrs. C. G. Kelley	Susanville	\$2 00
Fancy apron	Miss Mamie Todd	Susanville	\$1 00
Crochet skirt	Mrs. Slater	Susanville	\$2 00
Hemstitch apron	Miss Emma Strong	Susanville	\$3 00
Japanese embroidery	Miss Amy McNealy	Greenville	\$2 00
Knit skirt	Mrs. W. R. Harrison	Susanville	\$1 00
Four yards of lace	Mrs. W. R. Harrison	Susanville	\$2 00
Crochet purse	Mrs. J. C. Wood	Susanville	\$1 00
Mexican network	Mrs. J. C. Wood	Susanville	\$3 00
Embroidered banner	Miss H. Rowland	Long Valley	\$1 00
Embroidered table scarf	Mrs. J. T. Jones	Alturas	\$5 00
Embroidered handkerchief	Miss S. Hardgrave	Taylorville	\$2 00
Bracket lambrequin	Miss S. Hardgrave	Taylorville	\$2 00
Kensington embroidery	Miss S. Hardgrave	Taylorville	\$2 50
Linen embroidery	Miss D. Thompson	Quincy	\$2 00
Crochet scarf	Mrs. Lovell	Greenville	\$2 00
Crochet sack	Mrs. Lovell	Greenville	\$1 00
Mantel lambrequin	Mrs. T. Roseberry	Adin	\$2 00
Baby dress (hand made)	Miss G. Phillips	Susanville	\$2 00

SECOND DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Table scarf	Mrs. I. Hall	Greenville	\$1 00
Specimen of knitting	Mrs. O. L. Carter	Susanville	\$2 00
Embroidered lambrequin	Mrs. H. Snyder	Susanville	\$1 00
CLASS II—CHILDREN'S DEPARTMENT.			
Map of California	George McDow	Susanville	\$2 00
Pencil drawing	George McDow	Susanville	\$2 00
Map drawing	Maud Deciores	Buntingville	\$2 00
Map drawing	Pearl Bronson	Buntingville	\$1 00
Specimen of penmanship	Ada Gerking	Susanville	\$1 00
Ornamental violin	Alice Deiter	Susanville	\$1 00
Watch holder	Alice Deiter	Susanville	\$1 00
Outline splasher	Alice Deiter	Susanville	\$1 00
Lambrequin	Alice Deiter	Susanville	\$1 00
Fancy apron	Laura McBeth	Prattville	\$1 50
Rug	Effie Deciores	Buntingville	\$2 00
Knit underclothes	Theo. McClaska	Susanville	\$3 00
Outline pillow shams	Edith Fleming	Susanville	\$2 00
Patchwork quilt	Myrtle Moody	Susanville	\$2 00
Underwear (hand made)	Hattie Sanders	Susanville	\$2 00
Pincushion	Hattie Sanders	Susanville	\$1 00
Outline splasher	Hattie Sanders	Susanville	\$1 00
Plain cake	Lida Odette	Susanville	\$1 00
Collection of autumn leaves	George Woodstock	Susanville	\$1 00
Collection of grasses	George Woodstock	Susanville	\$1 00
Pencil drawing	Susie Easton	Susanville	\$1 00
Map drawing	Susie Easton	Susanville	\$2 00
Dressed doll	Cora Longanecker	Susanville	\$2 00
Oil paintings	Bee Partridge	Susanville	\$3 00
Display worsted work	Bee Partridge	Susanville	\$1 50
Dried apples	Marie Partridge	Susanville	\$2 00
Charm string	Bertha Lybarger	Susanville	\$1 00
Beaded cushion	Sadie Woodstock	Susanville	\$1 00
Six button holes	Sadie Woodstock	Susanville	\$1 50
Splasher	Delia Perkins	Susanville	\$2 00
Child's dress	Q. Perkins	Susanville	\$2 00
Cradle quilt	Mamie Perkins	Susanville	\$2 00
Fancy apron	Lillian Perkins	Susanville	\$1 00
Outline apron	Lillian Perkins	Susanville	\$1 50
Plate of biscuit	Della Perkins	Susanville	\$1 50
Outline pillow shams	Maud Long	Susanville	\$1 00
Button holes	Alice Craig	Susanville	\$1 50
Penmanship	Lola Craig	Susanville	\$2 00
Knit skirt	Bertie Masten	Susanville	\$1 50
Crochet scarf	Bertie Masten	Susanville	\$1 00
Lace	Bertie Masten	Susanville	\$2 00
Knit skirt	Belle Hayden	Susanville	\$1 50
Wreath	Hattie Ridenour	Susanville	\$2 00
Cornucopia bouquet	Hattie Ridenour	Susanville	\$1 50
Crochet skirt	Hattie Ridenour	Susanville	\$1 50
Table scarf	Hattie Ridenour	Susanville	\$1 50
Crochet tidy	Hattie Ridenour	Susanville	\$1 00
Outline apron	Ida Stoll	Susanville	\$1 00
Outline apron	Ida Stoll	Susanville	\$1 50
Scrap book	Cyrus Marsteller	Susanville	\$1 50
Charm string	Etta Wilkinson	Secret	\$1 00
Crochet tidy	Etta Wilkinson	Secret	\$1 00
Lamp mat	Etta Wilkinson	Secret	\$2 00
Lamp mat	Hannah Wilkinson	Secret	\$1 00
Scrap book	Willie Harrison	Susanville	\$1 00
Sketches from nature	Josie Humphrey	Susanville	\$2 00
Crochet skirt	Dora Summers	Susanville	\$1 00
Shawl, crochet	Dora Summers	Susanville	\$2 00
Crochet lace	Ollie Lovell	Greenville	\$2 00
Outline splasher	Stella Bransford	Greenville	\$1 00
Specimen knitting	Delia Blair	Susanville	\$1 00
Collection of bird's eggs	Geo. Woodstock	Susanville	\$1 00
Underclothes	Maud Long	Susanville	\$2 00

SECOND DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS III—BREAD, PASTRY, BUTTER, CHEESE, ETC.			
Butter	Cordelia Sharp	Buntingville	\$2 50
Bread	Ida Hulsman	Susanville	\$1 50
Fruit cake	Susie M. Arnold	Susanville	\$2 00
Loaf bread	Susie Easton	Susanville	\$1 00
Biscuit	Bee Partridge	Susanville	\$1 50
Plate of cookies	Mrs. L. W. Skinner	Milford	\$2 00
Light biscuit	Mrs. L. W. Skinner	Milford	\$1 00
Roll of butter	Mrs. J. C. Wemple	Milford	\$2 50
Roll of butter	Mrs. J. T. Masten	Susanville	\$2 00
Corn bread	Mrs. L. C. Stiles	Susanville	\$1 00
Graham bread	Mrs. L. C. Stiles	Susanville	\$2 00
Fancy cookies	Mrs. C. M. Stoll	Susanville	\$1 00
Brown bread	Mrs. C. M. Stoll	Susanville	\$2 00
Cheese	Wm. Ames	Susanville	\$5 00
Light cookies	Mrs. F. Longan- ecker	Susanville	\$1 00
Yeast bread	Mrs. F. Longan- ecker	Susanville	\$2 00
Rusk	Mrs. J. Branham	Susanville	\$2 00
Fruit cake	Mrs. J. W. Hassel- kus	Susanville	\$1 00
Corn bread	Mrs. L. Woodstock	Susanville	\$2 00
Light bread	Mrs. Shinn	Susanville	\$1 00
Cocoanut cake	Mrs. S. Hoffman	Susanville	\$2 00
Biscuit	Mrs. S. Hoffman	Susanville	\$2 00
Salt-rising bread	Mrs. Leonard	Susanville	\$2 00
Pound cake	On Hi	Susanville	\$3 00
Bread	Mrs. J. H. Summers	Susanville	\$1 00
Parker House rolls	Mrs. H. E. Partridge	Susanville	\$1 00
Lemon puffs	Mrs. H. E. Partridge	Susanville	\$1 00
Fruit cake	Mrs. M. Wilhams	Susanville	\$2 00
Pumpkin pie	Mrs. Leonard	Susanville	\$1 00
Sponge cake	Cora Longanecker	Susanville	\$1 50
CLASS IV—CANNED FRUITS, DRIED FRUITS, TABLE SAUCES, ETC.			
Sweet pickles	Mrs. J. Branham	Susanville	\$1 00
Red currant jelly	Mrs. J. Branham	Susanville	\$1 00
Sweet pickles	Mrs. H. E. Partridge	Susanville	\$2 00
Apricots	Mrs. D. C. Hyer	Susanville	\$2 00
Yellow peaches	Mrs. D. C. Hyer	Susanville	\$2 00
Gooseberries	Mrs. D. Kingsberry	Susanville	\$2 00
Tomato catsup	Mrs. O. L. Carter	Susanville	\$1 00
Mangoes	Mrs. A. Burnie	Susanville	\$2 00
Tomato catsup	Mrs. A. Burnie	Susanville	\$2 00
Jar of peaches	Mrs. A. Burnie	Susanville	\$2 00
Strawberry preserves	Mrs. Day	Susanville	\$1 00
Crabapple preserves	Mrs. Day	Susanville	\$1 00
Peach preserves	Mrs. Day	Susanville	\$1 00
Rhubarb butter	Mrs. H. McMurphy	Janesville	\$2 00
Thimbleberry jelly	Mrs. H. McMurphy	Janesville	\$2 00
Wild cherry jelly	Mrs. H. McMurphy	Janesville	\$2 00
Dried plums	Mrs. L. W. Skinner	Milford	\$2 00
Dried peaches	Mrs. L. W. Skinner	Milford	\$2 00
Dried apples	Mrs. L. W. Skinner	Milford	\$2 00
Dried currants	Mrs. L. W. Skinner	Milford	\$2 00
Dried plums	Mrs. W. M. Cain	Susanville	\$1 00
Dried apples	Mrs. W. M. Cain	Susanville	\$1 00
Red currant jelly	Mrs. H. W. Mylert	Janesville	\$2 00
Raspberry jelly	Mrs. H. W. Mylert	Janesville	\$2 00
Apple jelly	Mrs. H. W. Mylert	Janesville	\$2 00
Grape jelly	Mrs. H. W. Mylert	Janesville	\$2 00
Plum jelly	Mrs. H. W. Mylert	Janesville	\$2 00
Raspberry jam	Mrs. Wm. Greehn	Susanville	\$2 00
Crabapple jelly	Mrs. M. Williams	Susanville	\$2 00
Strawberry jelly	Mrs. M. Williams	Susanville	\$2 00
Jars of cucumbers	Mrs. D. Cramer	Susanville	\$2 00

TRANSACTIONS OF THE
SECOND DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Preserved tomatoes	Mrs. John Cahlan.	Susanville	\$2 00
Preserved peaches	Mrs. John Cahlan	Susanville	\$2 00
Apple butter	Mrs. F. Langan- ecker	Susanville	\$2 00
Preserved quinces	Mrs. John Cahlan.	Susanville	\$2 00
Strawberry jam	Mrs. S. J. Odette.	Susanville	\$2 00
Crabapple jelly	Mrs. S. D. Odette.	Susanville	\$1 00
Currant jelly	Mrs. A. McCrim- mon	Susanville	\$1 00
White currants	Mrs. W. M. McClel- land	Susanville	\$2 00
Preserved blackberries	Mrs. W. M. McClel- land	Susanville	\$2 00
Chow-chow	Mrs. W. M. McClel- land	Susanville	\$2 00
Strawberry jam	Mrs. W. M. McClel- land	Susanville	\$1 00
Preserved peaches	Mrs. W. M. McClel- land	Susanville	\$1 00
Preserved plums	Mrs. John Cahlan.	Susanville	\$1 00
Preserved white currants	Mrs. R. L. Davis	Susanville	\$2 00
Canned corn	Mrs. R. L. Davis	Susanville	\$2 00
Largest display of pickles, sliced	Mrs. W. M. McClel- land	Susanville	\$2 00
CLASS V—PAINTINGS, DRAWINGS, AND PICTURE-WORK.			
Banner, painted	Miss A. Van Nor- den	Susanville	\$2 00
Painted table scarf	Miss A. Van Nor- den	Susanville	\$2 00
Sea moss picture	Mrs. W. M. McClel- land	Susanville	\$1 00
Shadow painting	Mrs. W. S. Brashear	Susanville	\$2 00
Wax picture	Mrs. M. Marsteller	Susanville	\$2 00
Painting, fruit	Mrs. C. G. Kelley.	Susanville	\$5 00
Charcoal sketches	Miss D. M. Thomp- son	Quincy	\$5 00
Flowers, in oil	Miss D. M. Thomp- son	Quincy	\$5 00
Sketches from nature	Miss D. M. Thomp- son	Quincy	\$5 00
Largest collection of paintings	Miss D. M. Thomp- son	Quincy	\$15 00
Kensington painting	Miss S. Hardgrave	Taylorville	\$2 00
Painting in oil, flowers	Mrs. T. A. Roseberry	Adin	\$5 00
Painting in oil, portrait	Mrs. T. A. Roseberry	Adin	\$5 00
Painting in oil, landscape	Mrs. T. A. Roseberry	Adin	\$5 00
Collection of paintings	Mrs. C. G. Kelley.	Susanville	\$15 00
Landscape paintings	Mrs. J. T. Laird.	Alturas	\$5 00
CLASS VI—FLOWERS IN BLOOM, CUT FLOWERS, PLANTS, ETC.			
Collection of flowers	Mrs. L. L. Frost ..	Susanville	\$7 50
House plants	Mrs. J. G. Leonard.	Susanville	\$2 50
Collection of garden plants	Mrs. C. M. Stoll.	Susanville	\$5 00
Cut flowers	Mrs. C. M. Stoll.	Susanville	\$2 00
Fuchsias in bloom	Mrs. H. N. Skadan.	Susanville	\$2 50
Hanging basket plants	Mrs. A. Burnie ..	Susanville	\$2 00
Bouquet	Mrs. A. Burnie ..	Susanville	\$3 00
Collection of plants	Mrs. Day	Susanville	\$5 00
CLASS VII—GRAIN, FRUIT, AND VEGETABLES.			
Box of nectar apples	Cyrus Marsteller.	Susanville .....	.....
Bidwell squash	T. Ashby	Secret	\$3 00
Danver carrot	Hall & Snyder ..	Susanville	\$2 00
Caraway seed	I. N. Coldthurst ..	Tule Confedera- tion	\$2 00
Snowflake potatoes	I. N. Coldthurst ..	Tule Confedera- tion	\$1 00

SECOND DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Tomatoes	L. D. McDow	Susanville	\$5 00
Potatoes	L. D. McDow	Susanville	\$5 00
Hubbard squash	L. D. McDow	Susanville	\$3 00
Rattail corn	J. T. Alexander	Susanville	\$3 00
Yellow Danver onions	J. T. Alexander	Susanville	\$4 00
Watermelons	J. T. Alexander	Susanville	\$3 00
Redtop grass seed	J. Hall	Greenville	\$2 00
Muskmelons	J. T. Alexander	Susanville	\$3 00
Flat Dutch cabbage	J. T. Alexander	Susanville	\$4 00
Cucumbers	J. T. Alexander	Susanville	\$2 00
Sweet pumpkin	T. Ashby	Susanville	\$3 00
Sweet corn	J. T. Alexander	Susanville	\$2 00
Mangel-wurzel beets	S. M. Roberts	Milford	\$2 00
Mammoth cabbage	W. M. McClelland	Susanville	\$4 00
Short horn carrots	Wm. Dow	Susanville	\$2 00
Sweet peas	J. T. Alexander	Susanville	\$2 00
Tree bean	J. Hulsman	Susanville	\$2 00
Dwarf peas	J. Hulsman	Susanville	\$1 00
Drumhead cabbage	Mrs. W. Ravens- croft	Susanville	\$4 00
White potatoes	Mrs. W. Ravens- croft	Susanville	\$4 00
Sack of rye	G. De Forest	Susanville	\$5 00
Oregon club wheat	G. De Forest	Susanville	\$5 00
Timothy seed	Jno. Cahlan	Susanville	\$2 00
Centennial potatoes	V. E. Perry	Susanville	\$5 00
Sugar beets	D. Kingsberry	Susanville	\$2 00
Long blood beets	D. Kingsberry	Susanville	\$2 00
Turnip beets	D. Kingsberry	Susanville	\$2 00
Wheat in head	W. H. Sifford	Susanville	\$2 00
Sack of oats	J. T. Martin	Susanville	\$10 00
Popcorn	R. F. Moody	Susanville	\$2 00
Celery	J. W. Thompson	Quincy	\$4 00
Cream pumpkin	J. T. Martin	Susanville	\$3 00
Citron	Geo. Woodstock	Susanville	\$3 00
Potatoes	T. N. Long	Susanville	\$2 50
Red Danver onions	Jerry Tyler	Milford	\$4 00
Honey in comb	T. N. Long	Susanville	\$2 50
Five varieties of apples	A. T. Arnold	Susanville	\$5 00
Exhibit of manufactured cereals	H. Snyder	Susanville	\$10 00
Field corn	Jerry Tyler	Milford	\$2 50
Mammoth marblehead squash	Jerry Tyler	Milford	\$3 00
Peaches	Mrs. A. Gray	Janesville	\$2 50
Black Prince apples	W. M. McClelland	Susanville	\$2 50
Sweet Bow apples	W. M. McClelland	Susanville	\$2 50
Sugar apples	W. M. McClelland	Susanville	\$2 50
Fair Queen apples	W. M. McClelland	Susanville	\$2 50
King apples	W. M. McClelland	Susanville	\$2 50
Gravenstein apples	W. M. McClelland	Susanville	\$2 50
English Pippin apples	W. M. McClelland	Susanville	\$2 50
Romanites apples	W. M. McClelland	Susanville	\$2 50
Baldwin apples	W. M. McClelland	Susanville	\$2 50
Summer Bellflower apples	W. M. McClelland	Susanville	\$2 50
Sawyer apples	W. M. McClelland	Susanville	\$2 50
Exhibit of fall apples	J. T. Alexander	Susanville	\$2 50
Winter Bellflower	S. M. Roberts	Milford	\$2 50
Gloria Mundi	W. M. Cain	Susanville	\$2 50
Catawba grape	W. M. Cain	Susanville	\$3 00
Golden Gate plums	W. M. Cain	Susanville	\$2 50
Blackberries	W. M. Cain	Susanville	\$1 00
Keefer peas	W. M. Cain	Susanville	\$1 00
Red and white currants	W. M. Cain	Susanville	\$2 50
French prunes	J. B. Spalding	Susanville	\$2 50
Golden Gage plums	R. F. Moody	Susanville	\$2 50
Box of pears	L. L. Frost	Susanville	\$2 50
Red plums	Wm. Greehn	Susanville	\$2 50
Bartlett pears	Mrs. H. Sanders	Susanville	\$2 50
Box of pears	W. P. Hall	Susanville	\$2 50
Box of Muscat grapes	W. P. Hall	Susanville	\$2 50

SECOND DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Plums	L. P. Whiting	Milford	\$2 50
Red Pippin apples	D. C. Hyer	Susanville	\$2 50
Rhode Island Greening apples	D. C. Hyer	Susanville	\$2 50
Winesap apples	Jerry Tyler	Milford	\$2 50
Northern Spy apples	Jerry Tyler	Milford	\$2 50
Canada red apples	Jerry Tyler	Milford	\$2 50
Ben Davis apples	Jerry Tyler	Milford	\$2 50
Haggan apples	Jerry Tyler	Milford	\$2 50
Arnold's red apples	A. T. Arnold	Susanville	\$2 50
Arnold's white apples	A. T. Arnold	Susanville	\$2 50
Arnold's black apples	A. T. Arnold	Susanville	\$2 50
Crabapples	A. T. Arnold	Susanville	\$2 50
Pears	A. T. Arnold	Susanville	\$2 50
Plums	A. T. Arnold	Susanville	\$2 50
Fresh strawberries	Mrs. Day	Susanville	\$2 00
CLASS VIII—TAXIDERMY, MINERALS, CABINET CURIOS, ETC.			
Three cases of stuffed fowls and birds	Edward Garner	Quincy	\$10 00
Collection of stuffed birds and insects	R. F. Moody	Susanville	\$10 00
Mounted deer head	T. B. Sanders	Susanville	\$2 00
Four hundred day clock	H. Bereman	Susanville	\$5 00
Display of gold ores	H. Bereman	Susanville	\$10 00
Display of silver ores	H. Bereman	Susanville	\$5 00
Display of copper ores	H. Bereman	Susanville	\$5 00
CLASS IX—BEVERAGES.			
Home-made wine	Mrs. E. D. Hasselkus	Greenville	\$5 00
Home-made syrups	Mrs. L. C. Stiles	Susanville	\$3 00
Display of sodas, etc.	McKenzie Bros.	Greenville	\$5 00
Beer	F. Runge	Susanville	\$5 00
CLASS X—SADDLERY AND LEATHER WORK.			
Double buggy harness	L. H. Moore	Susanville	\$10 00
Double work harness	L. H. Moore	Susanville	\$10 00
Single buggy harness	L. H. Moore	Susanville	\$5 00
Gentleman's saddle	L. H. Moore	Susanville	\$5 00
Display of harness work	L. H. Moore	Susanville	\$15 00
Pair of sewed boots	Mrs. W. Ravenscroft	Susanville	\$5 00
Heavy boots	R. F. Moody	Susanville	\$5 00
Ladies' shoes	R. F. Moody	Susanville	\$2 50
Lady's saddle	C. M. Stoll	Susanville	\$5 00
Set of express harness	C. M. Stoll	Susanville	\$5 00
Double team harness	C. M. Stoll	Susanville	\$5 00
CLASS XI—MISCELLANEOUS.			
Whiffletree clip	Ed. Garner	Quincy	\$2 00
Display of upholstery	J. L. Groton	Susanville	\$10 00
Kitchen table	J. L. Groton	Susanville	\$2 50
Display of hams and bacon	J. Hulsman	Susanville	\$2 50
Top buggy	K. McLeod	Greenville	\$15 00
Open buggy	K. McLeod	Greenville	\$15 00
Beehive and honey	J. W. Hasselkus	Susanville	\$3 00
Display of job work	Plumas National	Quincy	\$10 00
Tinware	Asher Bros.	Susanville	\$10 00
Hay stacker	Asher Bros.	Susanville	\$3 00
Fancy sewing machine	Mrs. A. Burnie	Susanville	Diploma.

SPEED PROGRAMME.

MONDAY, SEPTEMBER 24, 1888.

RACE NO. 1—SPECIAL TROTTING.

District horses. Purse, three hundred dollars. First money, one hundred and eighty dollars; second, ninety dollars; third, thirty dollars. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Klamath, by Altamont	Thomas Raymond	Alturas.
Duster, by Tilton Almont	J. D. Byers	Janesville.
Engineer, by Buccaneer	E. P. Smith	Taylorville.

SUMMARY.

Engineer	1	1	1
Duster	2	2	2
Klamath	3	3	3

Time—2:43 $\frac{1}{4}$; 2:45 $\frac{1}{2}$; 2:44 $\frac{1}{2}$.

RACE NO. 2—TROTTING.

Two-year olds. District horses. Purse, three hundred dollars. First money, one hundred and eighty dollars; second, ninety dollars; third, thirty dollars. Mile heats; two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
J C, by Victor	J. S. Carter	Crescent Mills.
Effie G, by Tilton Almont	J. D. Byers	Janesville.
William B, by Tilton Almont	E. P. Smith	Taylorville.

SUMMARY.

Effie G	1	1	1
William B	2	2	2
J C	3	3	3

Time—3:02 $\frac{1}{2}$; 2:58.

RACE NO. 3—SPECIAL RUNNING.

Untried district horses. Purse, one hundred and fifty dollars. First money, ninety dollars; second, forty-five dollars; third, fifteen dollars. One half mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Joaquin, by Norfolk	Jack Adams	Alturas.
Billy Hazel, unknown	M. Snyder	Hayden Hill.
Kitty B, by Norfolk	Jack Adams	Alturas.

SUMMARY.

Joaquin	1
Billy Hazel.....	2
Kitty B	3

Time—0:53½.

RACE NO. 4—RUNNING.

For district horses. Purse, two hundred dollars; one hundred and twenty dollars to first horse; sixty dollars to second; twenty dollars to third. One quarter of a mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Duster, by Rifleman	James Henry	Chico.
Silvertail, unknown	William M. Ostrom	Alturas.
Jake Snyder, by Cottontail	M. Snyder	Hayden Hill.
Fox, unknown	J. M. Welch	Virginia C'y, Nev.
Pinto, unknown	P. R. Welch	Longville.
San Luis Obispo, unknown .....	.....	Chico.

SUMMARY.

Jake Snyder	1	1
San Luis Obispo	3	2
Duster	2	3
Silvertail	4	4

Time—0:24; 0:23½.

TUESDAY, SEPTEMBER 25, 1888.

RACE NO. 5—TROTTING.

Purse, five hundred dollars. Three hundred dollars to first horse; one hundred and fifty dollars to second; fifty dollars to third. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Victor, by Echo	George A. Doherty	Crescent Mills.
Sensation, by Peacock	T. E. Keating	Reno, Nev.
May Queen, by Graybuck	J. D. Byers	Janesville.

SUMMARY.

Sensation	2	1	1	1
Victor	1	2	2	2
May Queen	dis.			

Time—2:22½; 2:22; 2:24; 2:24.

RACE NO. 6—TROTTING.

District colts, yearlings. Purse, two hundred and fifty dollars. One hundred and fifty dollars to first horse; seventy-five dollars to second; twenty-five dollars to third. Half mile heats; two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
R B H, by Victor	G. A. Doherty	Crescent Mills.
Sage Hen, by William Tell	C. W. Cale	Greenville.
Samantha, by Engineer	E. P. Smith	Taylorville.
Hornet, by Engineer	J. S. Bransford	Greenville.
Thurman, by Victor	J. S. Carter	Crescent Mills.

SUMMARY.

Samantha	2	1	1
R B H	3	2	2
Thurman	1	3	dis.

Time—1:50 $\frac{1}{2}$; 1:47; 1:45.

RACE NO. 7—RUNNING.

Purse, five hundred dollars. Three hundred dollars to first horse; one hundred and fifty dollars to second; fifty to third. Mile heats; two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Mollie McShane, by Pillbox	J. R. Cain	Susanville.
Dave Douglass, by Leinster	Dan Dennison	Sacramento.
Nettie Moak, by Glencoe	J. Holland	Chico.
Lige Clark, by Ballotbox	Joseph Dyson	Summit.
Daisy D, by Wheatly	R. B. Cockrell	Santa Rosa.
Avondale, by Marmaduke	A. Y. Stevenson	Sacramento.
Panama, by Shannon	Small & Whelan	Reno, Nev.
Alcatraz, by Joe Hooker	Small & Whelan	Reno, Nev.
Avondale, unknown	J. J. Taylor	Santa Rosa.
Index, by Thad Stevens	Frank Anderson	Santa Rosa.

SUMMARY.

Dave Douglass	2	1	1
Avondale	1	2	2
Lige Clark	3	3	3
Nettie Moak			dis.

Time—1:45 $\frac{3}{4}$; 1:47; 1:45 $\frac{1}{2}$.

RACE NO. 8—RUNNING.

Free for all. Purse, four hundred dollars. Two hundred and forty dollars to first horse; one hundred and twenty dollars to second; forty dollars to third. One and three quarters miles dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Mollie McShane, by Pillbox	J. R. Cain	Susanville.
Haidee, by King Alfonzo	Dan Dennison	Sacramento.
Snuffbox, by Ballotbox	Joseph Dyson	Summit.
Ottawa, by Cousin Vic	Joseph Dyson	Summit.
Susie S, by Marmaduke	A. Y. Stevenson	Sacramento.
Alcatraz, by Joe Hooker	Small & Whelan	Reno, Nev.
Avondale, unknown	J. J. Taylor	Santa Rosa.
Index, by Thad Stevens	Frank Anderson	Santa Rosa.

SUMMARY.

Haidee	1
Susie S	2
Snuffbox	3
Mollie McShane	4

Time—3:11.

WEDNESDAY, SEPTEMBER 26, 1888.

RACE No. 10—PACERS AND TROTTERS.

Free for all. Purse, six hundred dollars. Three hundred and sixty dollars to first horse; one hundred and eighty dollars to second; sixty dollars to third. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Belle Spencer, by Black Ralph	E. V. Spencer	Susanville.
Ned, unknown	T. E. Keating	Reno, Nev.
May Queen, by Graybuck	J. D. Byers	Janesville.
George Wappel, by Brigadier	C. H. Lawrence	Greenville.
Victor, by Woodburn	George A. Doherty	Crescent.

SUMMARY.

Victor	1	1	1
Ned	2	2	2

Time—2:26½; 2:28½; 2:28.

RACE No. 11—TROTTING.

2:40 Class. Purse, four hundred dollars. Free for all. Two hundred and forty dollars to first horse; one hundred and twenty dollars to second; forty dollars to third. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Lohengrin, by Echo	J. W. Dowell	Marysville.
Sensation, by Peacock	T. E. Keating	Reno, Nev.
Wanda, unknown	Small & Whelan	Reno, Nev.
Duster, by Tilton Almont	J. D. Byers	Janesville.
Engineer, by Buccaneer	E. P. Smith	Crescent Mills.
Maxwell, by William Tell	C. H. Lawrence	Greenville.

Walkover for Sensation.

SPECIAL TROTTING.

Free for all. Purse, four hundred dollars. Two hundred and forty dollars to first horse; one hundred and twenty dollars to second; forty dollars to third. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Engineer, by Buccaneer	E. P. Smith	Crescent Mills.
Duster, by Tilton Almont	J. D. Byers	Janesville.
Maxwell, by William Tell	C. H. Lawrence	Greenville.

SUMMARY.

Engineer	1	1	1
Maxwell	2	2	2
Duster	3	3	3

Time—2:39½; 2:39; 2:43¼.

RACE No. 12—RUNNING.

Free for all. Purse, two hundred and fifty dollars. One hundred and fifty dollars to first horse; seventy-five dollars to second; twenty-five dollars to third. Three-quarters mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Baby Bunting, by Cousin Vic	J. Q. Anderson	Summit.
Joe Marsh, by Joe Hooker	Henry Mann	Alturas.
Lige Clark, by Ballotbox	Joseph Dyson	Summit.
San Luis Obispo, unknown	J. Stevenson	Chico.
Daisy D, by Wheatly	R. B. Cockrell	Santa Rosa.
Ogville, by Norfolk	Small & Whelan	Reno, Nev.
Ogalena, by Joe Hooker	Small & Whelan	Reno, Nev.
Nell Banta, unknown	D. W. McKenzie	Greenville.
Al Farrow, by Connor	M. T. Walters	Lakeview, Or.
Pinto, unknown	P. R. Welch	Longville.

SUMMARY.

Al Farrow	1
Lige Clark	2
Baby Bunting	3
San Luis Obispo	4

Time—1:18¾.

RACE No. 13—RUNNING.

Free for all. Purse, three hundred and fifty dollars. Two hundred and ten dollars to first; one hundred and five dollars to second; thirty-five dollars to third. One and one half miles dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Mollie McShane, by Pillbox	J. R. Cain	Susanville.
Haidee, by King Alfonso	A. Y. Stevenson	Santa Rosa.
Snuffbox, by Ballotbox	Jos. Dyson	Summit.
Ottawa, by Cousin Vic	Jos. Dyson	Summit.
Daisy D, by Wheatly	R. B. Cockrell	Santa Rosa.
Panama, by Shannon	Small & Whelan	Reno, Nev.
Alcatraz, by Joe Hooker	Small & Whelan	Reno, Nev.
Avondale, unknown	J. J. Taylor	Santa Rosa.
Index, by Thad Stevens	Frank Anderson	Santa Rosa.

SUMMARY.

Haidee	1
Snuffbox	2
Ottawa	3

Time—2:47.

RACE No. 14—RUNNING.

Free for all. Purse, three hundred dollars. One hundred and eighty dollars to first horse; ninety dollars to second; thirty dollars to third. Mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Baby Bunting, by Cousin Vic	J. Q. Anderson	Summit.
Joe Marsh, by Joe Hooker	Henry Mann	Alturas.
Blue Bonnet, by Joe Hooker	Dan Dennison	Sacramento.
Lige Clark, by Ballotbox	Jos. Dyson	Summit.
Daisy D, by Wheatly	R. B. Cockrell	Santa Rosa.
Avondale, by Marmaduke	A. Y. Stevenson	Santa Rosa.
Panama, by Shannon	Small & Whelan	Reno, Nev.
Rivers, by Joe Hooker	Small & Whelan	Reno, Nev.
Al Farrow, by Connor	M. T. Walters	Lakeview, Or.

SUMMARY.

Al Farrow	1
Blue Bonnet	2
Avondale	3
Lige Clark	4

Time—1:44.

THURSDAY, SEPTEMBER 27, 1888.

RACE No. 15—TROTTING.

District horses. Purse, three hundred and fifty dollars. Two hundred and ten dollars to first horse; one hundred and five dollars to second; thirty-five dollars to third. Mile heats; two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Alturas, by Atherton	E. Lauer	Alturas.
Wanda, unknown	Small & Whelan	Reno, Nev.
Duster, by Tilton Almont	J. D. Byers	Janesville.

Walkover for Duster.

SPECIAL RACE—TROTTING.

Purse, three hundred dollars. One hundred and eighty dollars to first horse; ninety dollars to second; thirty dollars to third. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Geo. Wapple, by Brigadier	Chas. Lawrence	Greenville.
Engineer, by Buccaneer	E. P. Smith	Crescent.
May Queen, by Graybuck	J. D. Byers	Janesville.

SUMMARY.

May Queen	1	1	1
Engineer	2	2	2
Geo. Wapple	3	3	3

Time—2:34 $\frac{1}{4}$; 2:34 $\frac{1}{2}$; 2:35.

RACE No. 16—TROTTING.

Free for all. Purse, eight hundred dollars. Four hundred and eighty dollars to first horse; two hundred and forty dollars to second; eighty dollars to third. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Belle Spencer, by Black Ralph.....	E. V. Spencer	Susanville.
Sensation, by Peacock	T. E. Keating	Reno, Nev.
Victor, by Woodburn.....	G. A. Doherty.....	Crescent.

SUMMARY.

Sensation	1	1	1
Victor.....	2	2	2

Time—2:23½; 2:22; 2:23½.

RACE No. 17—RUNNING.

For district horses. Purse, two hundred dollars. One hundred and twenty dollars to first horse; sixty dollars to second; twenty dollars to third. One half mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Albatros, by Pillbox	M. T. Walters	Lakeview, Or.
Duster, by Rifleman	James Henry	Chico.
Silvertail, sire unknown	W. M. Ostrom	Alturas.
Joe Marsh, by Joe Hooker.....	Henry Mann	Hayden Hill.
Jake Snyder, by Cottontail.....	M. Snyder	Hayden Hill.
Pinto, sire unknown	P. R. Welch	Longville.
San Luis Obispo, sire unknown	J. Stevenson	Chico.
Lige Clark, by Ballotbox.....	Jo. Dyson	Summit.
Ogalene, by Joe Hooker	Small & Whelan	Reno, Nev.
Panama, by Shannon.....	Small & Whelan	Reno, Nev.
Nell Banta.....	D. W. McKenzie	Greenville.

SUMMARY.

Lige Clark	1
Jake Snyder	2
Nell Banta	3
Joe Marsh.....	4

Time—0:50¾.

RACE No. 18—RUNNING.

Free for all. Purse, three hundred dollars. One hundred and eighty dollars to first horse; ninety dollars to second; thirty dollars to third. One and one fourth miles dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Dave Douglass, by Leinster.....	D. Dennison	Sacramento.
Nettie Moak, by Glencoe.....	J. Holland	Chico.
Snuffbox, by Ballotbox	Jo. Dyson	Summit.
Susie S, by Marmaduke.....	A. Y. Stevenson	Santa Rosa.
Avondale, by Marmaduke	A. Y. Stevenson	Santa Rosa.
Alcatraz, by Joe Hooker.....	Small & Whelan	Reno, Nev.
Rivers, by Joe Hooker.....	Small & Whelan	Reno, Nev.
Avondale, sire unknown.....	J. J. Taylor	Santa Rosa.
Index, by Thad Stevens	Frank Anderson	Santa Rosa.

TRANSACTIONS OF THE

SUMMARY.

Susie S	1
Dave Douglass	2
Avondale	3

Time—2:12½.

RACE No. 19—DOUBLE TEAM TROTTING.

Purse, one hundred and fifty dollars. Ninety dollars to first team; forty-five dollars to second; fifteen dollars to third. Mile heats; best two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Isaac M and Fred	Charles Lawrence	Greenville.
Patchen and Slickens	Jake Forkner	Janesville.
Charles M and Billy	C. A. Merrill	Susanville.

SUMMARY.

Isaac M and Fred	2	1	1
Patchen and Slickens	1	2	2
Charles M and Billy	dis.		

Time—3:28; 3:34; 3:35.

SPECIAL RACE—RUNNING.

Purse, two hundred dollars. One hundred and twenty dollars to first horse; sixty dollars to second; twenty dollars to third. Two miles dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Mollie McShane, by Pillbox	J. R. Cain	Susanville.
Lige Clark, by Ballotbox	J. Dyson	Summit.
Snuffbox, by Ballotbox	J. Dyson	Summit.

SUMMARY.

Snuffbox	1
Mollie McShane	2
Lige Clark	3

Time—3:52.

FRIDAY, SEPTEMBER 28, 1888.

RACE No. 20—PACING.

Free for all. Purse, five hundred dollars. Three hundred dollars to first horse; one hundred and fifty dollars to second; fifty dollars to third. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Ned, pedigree unknown	T. E. Keating	Reno, Nev.
George Wapple, by Brigadier	Charles Lawrence	Greenville.
Flournoy	E. Lauer	Alturas.

SUMMARY.

Ned	1	1	1
Flournov	2	2	2
George Wapple	3	3	3

Time—2:40½; 2:41½; 2:41½.

RACE NO. 21—SINGLE BUGGY TROT.

District horses. Purse, one hundred dollars. Sixty dollars to first horse; thirty dollars to second; ten dollars to third. Mile heats; two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Plumas, by Plumas	D. McIntyre	Greenville.
Isaac M	Charles Lawrence	Greenville.
Billy	C. A. Merrill	Susanville.
Slickens	P. Halstead	Quincy.

SUMMARY.

Slickens	2	1	1
Plumas	1	2	3
Isaac M	3	3	2

Time—3:05; 3:10; 3:07.

RACE NO. 22—RUNNING.

Free for all. Purse, eight hundred dollars. Four hundred and eighty dollars to first horse; two hundred and forty dollars to second; eighty dollars to third. Two miles and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Mollie McShane, by Pillbox	J. R. Cain	Susanville.
Dave Douglass, by Leinster	D. Dennison	Sacramento.
Snuffbox, by Ballotbox	Joe Dyson	Summit.
Lige Clark, by Ballotbox	Joe Dyson	Summit.
Daisy D, by Wheatly	R. B. Cockrell	Santa Rosa.
Susie S, by Marmaduke	A. Y. Stevenson	Santa Rosa.
Alcatraz, by Joe Hooker	Small & Whelan	Reno, Nev.
Avondale, pedigree unknown	J. J. Taylor	Santa Rosa.
Index, by Thad Stevens	Frank Anderson	Santa Rosa.

SUMMARY.

Susie S	1	1
Dave Douglass	2	2

Dave Douglass and Susie S started for the entrance money.

Time—3:53; 3:58.

RACE No. 23—RUNNING.

Purse, two hundred dollars. First horse, one hundred and twenty dollars; second, sixty dollars; third, twenty dollars. Half mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Mollie McShane, by Pillbox	J. R. Cain	Susanville.
Ottawa, by Cousin Vic.	Jos. Dyson	Summit.
Nell Banta, unknown	D. W. McKenzie	Greenville.
Duster, by Rifleman	James Henry	Chico.
St. Leger, by Joe Hooker	J. F. Holland	Chico.

SUMMARY.

Mollie McShane	1
Ottawa	2
St. Leger	3
Duster	4
Nell Banta	5

Time—0:51½.

RACE No. 24—GO AS YOU PLEASE.

To drive nearest to 4:30. Purse, one hundred dollars. First horse, sixty dollars; second, thirty dollars; third, ten dollars. Mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Sport, unknown	D. C. Hyer	Susanville.
George, unknown	A. McCrimmon	Susanville.
Isaac M, unknown	Charles Lawrence	Greenville.
Bay Frank, unknown	Frank Tetrean	Chico.
Polly, unknown	J. V. Flint	Chico.
Red Robin, unknown	J. R. Cain	Susanville.
Weasel, unknown	D. C. Hyer	Susanville.

SUMMARY.

Red Robin	1
Bay Frank	2
George	3
Weasel	4

Time—4:33.

TRANSACTIONS

OF THE

TWELFTH DISTRICT AGRICULTURAL ASSOCIATION

For the Year 1888,

Composed of the Counties of Lake and Mendocino.

REPORT.

LAKEPORT, October 8, 1888.

To the honorable the State Board of Agriculture:

GENTLEMEN: The Directors of the Twelfth District Agricultural Association submit this, their report of the transactions of said association, for the year.

Q. V. P. DAY, Secretary.

PREMIUMS AWARDED—1888.

FIRST DEPARTMENT.

Name of Animal.	Exhibitor.	Address.	Award.
CLASS I—THOROUGHBREDS—STALLIONS.			
Telegraph	G. Scudamore	Lakeport	\$5 00
B B	A. S. Haskins	Lakeport	\$10 00
CLASS II—HORSES OF ALL WORK—STALLIONS.			
Rob Roy	J. R. Garner	Lower Lake	\$5 00
Revenue	P. Henry	Ukiah	\$10 00
Lafayette	Wm. Davidson	Lakeport .....	.....
MARES.			
Peggy Ringgold	P. Henry	Ukiah	\$8 00
Nettie C.	G. W. Christie	Lakeport	\$4 00
Kate	D. C. Rumsey	Lakeport .....	.....
Queen	D. C. Rumsey	Lakeport .....	.....
Lamplight Dode	Alex. Perry	Ukiah .....	.....
FILLIES.			
Two years old	T. J. Faught	Lakeport	\$5 00
One year old	T. J. Faught	Lakeport	\$4 00
CLASS III—DRAFT HORSES—STALLIONS.			
Togus	W. H. Kent	Little River	\$10 00
Roland, Jr.	W. H. Kent	Little River	\$5 00
Blue Jay, colt, four months old	F. M. Burroughs ..	Upper Lake	\$3 00
FILLIES.			
Gypsy, five months old	F. M. Burroughs ..	Upper Lake	\$3 00
CLASS IX—SADDLE HORSES.			
Colonel	Maurice Keatinge ..	Lower Lake	\$2 00
Lottie, three years old	W. A. Christie	Lakeport	\$5 00
CLASS X—JACKS.			
Black Jack	Maurice Keatinge ..	Lower Lake	\$10 00
Don	R. Keatinge	Lower Lake	\$5 00
CLASS I—CATTLE—DURHAMS—BULLS.			
.....	G. Scudamore	Lakeport .....	.....
Ashland	W. N. Thompson ..	Lakeport	\$10 00
Jumbo	T. Manning	Lakeport	\$5 00
Yolo Day, calf	W. N. Thompson ..	Lakeport	\$4 00
HEIFERS.			
Lady, calf	W. N. Thompson ..	Lakeport	\$4 00
CLASS II—JERSEYS—COWS.			
Kittie	Larkin Kelsey	Lakeport	\$10 00
CLASS VIII—GRADED CATTLE—COWS.			
Daisy	J. M. Wooldridge ..	Lakeport	\$8 00
Star, heifer calf	G. W. Christie	Lakeport	\$2 00
POULTRY.			
Bronze turkeys, one pair	J. Banks	Lakeport	\$2 50
Light Brahmas, cock and hens	J. M. Wooldridge ..	Lakeport	\$2 00
CLASS IV—DRAFT HORSES, NORMANS, PERCHERONS, ETC.			
Daisy, five months old	D. C. Rumsey	Lakeport	\$3 00
Myrtle, four months old	D. C. Rumsey	Lakeport	\$1 50

FIRST DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
CLASS V—ROADSTERS—STALLIONS.			
Black Sultan	Geo. Ellis	Lakeport	\$10 00
Mat, two years old	Mat. Johnson	Upper Lake	\$3 00
Lanceloe, two years old	Mat. Johnson	Upper Lake	
Daniel Deronda, two years old	J. W. Boggs	Kelseyville	
Keepsake, two years old	L. H. Boggs	Lakeport	\$6 00
Eugene, one year old	A. G. Platt	Lakeport	
Oakland Boy, four months old	G. W. Christie	Lakeport	
Ralph C, two years old	G. W. Christie	Lakeport	
Oakland Alex, four months old	Alex. Perry	Ukiah	\$1 00
—, one year old	W. C. Helman	Ukiah	\$1 00
—, one year old	W. C. Helman	Ukiah	\$2 00
—, four months old	Seth Richabaugh	Kelseyville	\$3 00
MARES.			
Dolly	D. C. Rumsey	Lakeport	
Mattie Medium	T. Manning	Lakeport	
Daisy, three years old	A. G. Platt	Lakeport	
Bent B	L. H. Boggs	Lakeport	\$8 00
Fillarea	T. Manning	Lakeport	\$4 00
Oakland Lilly, four months old	T. Manning	Lakeport	
Oakland Maid, four months old	P. Henry	Ukiah	\$3 00
Lilly, four months old	D. C. Rumsey	Lakeport	\$1 00
CLASS VI—CARRIAGE TEAM.			
Bess and Frank	W. W. Thompson	Lakeport	\$5 00

SECOND DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Corn on stalk	E. P. Wray	Lakeport	\$2 50
Sugar corn	E. P. Wray	Lakeport	\$2 50
Timothy	E. P. Wray	Lakeport	\$2 50
One half dozen stalks of corn	H. Dorr	Lakeport	\$2 50
Beardless barley	G. Scudamore	Lakeport	\$2 50
Common barley	G. Scudamore	Lakeport	\$2 50
Common wheat	G. Scudamore	Lakeport	\$2 50
Wheat in sheaves	G. Scudamore	Lakeport	\$2 50
Beardless barley in sheaves	G. Scudamore	Lakeport	\$2 50
Common barley in sheaves	G. Scudamore	Lakeport	\$2 50
Bale of hops	T. J. Faught	Lakeport	\$5 00
Snowflake wheat	J. M. Combs	Lakeport	\$2 50
Alfalfa seed	J. Phillips	Upper Lake	\$2 50
Beets	H. C. Wilkinson	Lakeport	
Strawberries	N. T. Wooldridge	Lakeport	
CLASS II.			
Garden seeds	M. Keatinge	Lower Lake	\$10 00
Watermelon	M. Keatinge	Lower Lake	\$1 00
Irish potatoes and vegetables	M. Keatinge	Lower Lake	
Irish potatoes	R. P. Eachus	Lakeport	\$10 00
Irish potatoes	W. Cogswell	Lakeport	\$7 50
Irish potatoes	E. P. Wray	Lakeport	\$5 00
Pumpkins	W. B. McCabe	Kelseyville	\$1 00
Squashes	W. B. McCabe	Kelseyville	\$1 00
Sweet potatoes	J. Phillips	Upper Lake	\$2 50
Tomatoes	R. P. Eachus	Lakeport	\$1 00
Onions	R. P. Eachus	Lakeport	\$1 00
Cabbage	W. D. Ashill	Lower Lake	
Irish potatoes	J. W. Anneth	Kelseyville	
Tomatoes	G. Scudamore	Lakeport	
Dry beans	W. D. Rantz	Lakeport	
Irish potatoes	W. D. Rantz	Lakeport	

FIRST DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Tomatoes	J. Phillips	Upper Lake .....	.....
Sweet potatoes	R. P. Eachus	Lakeport .....	.....
Cabbage	R. P. Eachus	Lakeport .....	.....
General display of garden vegetables	E. P. Wray	Lakeport	\$5 00
Cabbage	E. P. Wray	Lakeport	\$1 00
Irish potatoes	W. K. Vickray	Lakeport .....	.....
Mangel-wurzel beets	N. T. Wooldridge	Lakeport .....	.....
Pumpkins	W. A. Eachus	Lakeport .....	.....
Green beans	E. P. Wray	Lakeport	\$1 00
Dry beans	E. P. Wray	Lakeport	\$1 00
Peas	E. P. Wray	Lakeport	\$1 00
Pumpkins	E. P. Wray	Lakeport .....	.....
Irish potatoes	Chas. Hurt	Round Valley .....	.....
Onions from seed	Chas. Hurt	Round Valley .....	.....
Garden seeds	H. Wambold	Blue Lakes	\$5 00
CLASS III.			
Collection of grasses	Ada Bradley	Lakeport	\$2 00
Foliage plants	Mrs. M. Simpson	Lakeport .....	.....
Plants in bloom	Mrs. J. W. Mackall	Lakeport	\$3 00
Cut flowers	Mrs. E. P. Wray	Lakeport	\$5 00
Cut flowers	Mrs. D. C. Rumsey	Lakeport .....	.....
CLASS IV.			
Cheese	R. W. Rupe	Willits	\$2 50
Four loaves of bread	Mrs. I. Christie	Lakeport	\$2 50
Four loaves of bread	Mrs. J. Banks	Lakeport .....	.....
Four loaves of bread	Mrs. G. H. Lyon	Lakeport	\$2 00
Butter	G. Scudamore	Lakeport	\$2 50
Butter	Mrs. L. Sailor	Lakeport .....	.....
Cheese	Mrs. L. Sailor	Lakeport .....	.....

THIRD DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Best display and variety of pears	G. Scudamore	Lakeport	\$10 00
Best display and variety of pears	E. P. Wray	Lakeport	\$7 00
Best display and variety of pears	H. Dorr	Lakeport	\$5 00
Best display and variety of pears	M. Runnells	Lower Lake	\$3 00
Best display and variety of pears	A. J. Mothersaid	Kelseyville	\$1 00
Best display and variety of pears	Jos. Mendenhall	Upper Lake .....	.....
Best display and variety of pears	George Tucker	Lakeport .....	.....
Pears	W. D. Rantz	Lakeport .....	.....
Pears	M. Keatinge	Lower Lake .....	.....
Pears	Sam. Morrison	Lakeport .....	.....
Pears	L. P. Berger	Lakeport .....	.....
Best display and variety of apples	G. Scudamore	Lakeport	\$10 00
Best display and variety of apples	E. P. Wray	Lakeport	\$7 00
Best display and variety of apples	M. Keatinge	Lower Lake	\$5 00
Best display and variety of apples	M. Runnells	Lower Lake	\$3 00
Best display and variety of apples	Jos. Mendenhall	Upper Lake	\$1 00
Apples	P. Copping	Lakeport .....	.....
Apples	A. J. Mothersaid	Kelseyville .....	.....
Apples	Sam. Morrison	Lakeport .....	.....
Apples	L. P. Berger	Lakeport .....	.....
Best display and variety of peaches	M. Keatinge	Lower Lake	\$10 00
Best display and variety of peaches	L. P. Berger	Lakeport	\$7 00
Best display and variety of peaches	G. Scudamore	Lakeport	\$5 00
Best display and variety of peaches	J. R. Thomas	Redwood Valley	\$3 00
Best display and variety of peaches	Jos. Mendenhall	Upper Lake	\$1 00
Peaches	F. Weideman	Lakeport .....	.....
Peaches	A. J. Mothersaid	Kelseyville .....	.....
Peaches	Sam. Morrison	Lakeport .....	.....

THIRD DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Best display and variety of plums	G. Scudamore	Lakeport	\$10 00
Best display and variety of plums	L. P. Berger	Lakeport	\$7 00
Best display and variety of figs	L. P. Berger	Lakeport	\$8 00
Japan plums	Orin Bishop	Lakeport .....	.....
Figs	Jas. Phillips	Upper Lake .....	.....
Quinces	Mrs. J. L. Smyth	Lakeport	\$5 00
Quinces	G. Scudamore	Lakeport	\$3 00
French prunes	M. Keatinge	Lower Lake	\$10 00
English walnuts	Sam. Morrison	Lakeport .....	.....
CLASS II.			
Jellies and jams	Ada Bradley	Lakeport	\$5 00
Jellies and jams	Mrs. W. E. Hixon	Lakeport	\$3 00
Jellies and jams	Mrs. R. T. Polk	Lakeport	\$10 00
Fruit in glass	M. Wambold	Lakeport	\$10 00
Fruit in glass	Mrs. M. Keatinge	Lower Lake	\$5 00
Fruit in glass	G. Scudamore	Lakeport	\$3 00
Display of pickles	Mrs. E. P. Wray	Lakeport	\$2 50
Jellies and jams	Mrs. E. P. Wray	Lakeport	\$5 00
Jellies and jams	G. Scudamore	Lakeport	\$3 00
Brandied peaches	Miss H. A. Bole	Kelseyville	\$2 50
Fruit in glass	Ada Bradley	Lakeport	\$3 00
Fruit in glass	H. C. Wilkinson	Lakeport	\$3 00
Fruit in glass	Mrs. M. Simpson	Lakeport .....	.....
Jellies and jams	Mrs. Dora Rowden	Kelseyville	\$5 00
Display of fruits	M. Keatinge	Lower Lake	G. med.
CLASS III.			
Dried nectarines	H. Dorr	Lakeport	\$2 50
Dried apples	W. D. Rantz	Lakeport	\$2 50
Dried plums	W. D. Rantz	Lakeport .....	.....
Dried apples	M. Keatinge	Lower Lake .....	.....
Dried peaches	M. Keatinge	Lower Lake .....	.....
Dried plums	M. Keatinge	Lower Lake .....	.....
Dried prunes	M. Keatinge	Lower Lake .....	.....
Dried peaches	M. Runnells	Lower Lake	\$2 50
Dried plums	M. Runnells	Lower Lake	\$2 50
Dried prunes	H. C. Wilkinson	Lakeport	\$5 00
Dried prunes	Mrs. D. C. McDougal	Lakeport	\$2 50
Walnuts	Jas. Phillips	Upper Lake .....	.....
CLASS IV.			
Grapes	Nelson McNeil	Lakeport .....	.....
Display and variety of grapes	M. Keatinge	Lower Lake	\$10 00
Display and variety of grapes	L. P. Berger	Lakeport	\$20 00
Table grapes	L. P. Berger	Lakeport	\$5 00
Table grapes	J. Mendenhall	Upper Lake	\$2 50
Display of wine grapes	M. Keatinge	Lower Lake	\$10 00
Display of wine grapes	L. P. Berger	Lakeport	\$7 50
Table grapes	H. C. Wilkinson	Lakeport .....	.....
Display of grapes	W. D. Ashill	Lower Lake .....	.....
CLASS V.			
Zinfandel and Riesling	L. P. Berger	Lakeport	Diploma.
Zinfandel, Riesling, and Sauvignon Verte	S. C. Hastings	Lakeport	Diploma.
Zinfandel, Riesling, and Burger	H. F. Parks	Lower Lake	Diploma.

FOURTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Brick	E. C. Stecker	Lakeport .....	.....
Furniture	W. E. Green	Lakeport	\$5 00
Mantel board	J. H. Lyon & Son	Lakeport	\$5 00
Double harness	J. F. Edmonds	Lakeport	\$5 00
Single harness	J. F. Edmonds	Lakeport	\$3 00
Display of harness	J. F. Edmonds	Lakeport	\$5 00
One pair of gent's dress boots	J. B. Muellen	Lakeport	\$2 50
Two pairs of gent's dress shoes	J. B. Muellen	Lakeport	\$2 50
Display of boots and shoes	J. B. Muellen	Lakeport .....	.....

FIFTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Knit shawl	Miss Kate Bray	Lakeport	\$2 50
Lady's knit skirt	Miss Kate Bray	Lakeport .....	.....
Lady's knit skirt	Miss Sallie Christie	Lakeport	\$2 50
Skirt with knit lace	Miss Sallie Christie	Lakeport	\$2 00
Goose quill wreath	Mrs. Spencer	Lakeport	\$2 00
Pincushion	I. Vickroy	Lakeport	\$2 00
Knit skirt	I. Vickroy	Lakeport	\$2 00
Knit lace	I. Vickroy	Lakeport .....	.....
Lady's apron	I. Vickroy	Lakeport .....	.....
Table scarf	Mrs. M. Hobbs	Lakeport	\$1 00
Sofa cushion	Mrs. M. Hobbs	Lakeport .....	.....
Mantel lambrequin	Mrs. M. Hobbs	Lakeport	\$2 50
Eleven oil paintings	Maud Hobbs	Lakeport	\$10 00
Three oil paintings	Iva Gully	Lakeport	\$2 00
Mantel lambrequin	Mrs. J. W. Blake	Lakeport .....	.....
Display of etching	Mrs. J. W. Blake	Lakeport	\$2 50
Crochet work	Miss Ada Bradley	Lakeport .....	.....
Knitted lace	Miss M. A. Dickenson	Lakeport	\$2 00
Crochet lace	Miss M. A. Dickenson	Lakeport .....	.....
Carriage afghan	Miss M. A. Dickenson	Lakeport	\$2 50
Three water color paintings	Mrs. M. Arnold	Lakeport .....	.....
Three aprons	Miss Ada Bradley	Lakeport	\$2 00
Pillow cases	Miss Ada Bradley	Lakeport .....	.....
Lady's skirt	Miss Ada Bradley	Lakeport	\$2 00
Patchwork quilt	Mrs. Atkinson	Lakeport	\$2 50
Table scarf	Miss J. Ruddell	Lakeport	\$2 00
Two oil paintings	Mrs. M. Keatinge	Lower Lake .....	.....
Pencil drawing	Mrs. M. Keatinge	Lower Lake .....	.....
Child's afghan	Mrs. Ed. Norris	Lakeport	\$2 00
Display of paintings	Miss Mary Phelan	Lakeport	\$7 50
Log cabin quilt	Mrs. A. Olsen	Kelseyville	\$2 00
Table cover	Mrs. A. Olsen	Kelseyville	\$2 50
Oil paintings	Miss Everett	Lakeport	\$1 50
Two patchwork quilts	Miss E. Johnson	Lakeport	\$2 50
Knit lace	Miss E. Johnson	Lakeport .....	.....
Painted handkerchief	Mrs. M. Simpson	Lakeport .....	.....
Silk patchwork quilt	Mrs. M. E. Hixon	Lakeport	\$2 50
Display of millinery	Mrs. Belle Lee	Lakeport	\$5 00
Display of bazaar	Mrs. Belle Lee	Lakeport .....	.....
Baby dress	Mrs. Belle Lee	Lakeport	\$1 00
Embroidered banner	Mrs. Belle Lee	Lakeport .....	.....
Embroidered footstool	Mrs. Belle Lee	Lakeport	\$2 00
Drawn thread apron	Mrs. Belle Lee	Lakeport .....	.....
Three crochet skirts	Miss E. McCawley	Lakeport .....	.....
Silk lace and tatting	Miss E. McCawley	Lakeport .....	.....

FIFTH DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Display of paintings	Mrs. J. W. Mackall.	Lakeport	\$5 00
Embroidered sofa pillow	Mrs. J. W. Mackall.	Lakeport	\$2 50
Paintings on plush	Mrs. J. W. Mackall.	Lakeport .....	.....
Display of moss	Mrs. J. W. Mackall.	Lakeport	\$2 00
Embroidered wall panel	Mrs. J. W. Mackall.	Lakeport	\$2 00
Raised embroidery	Mrs. W. N. Thompson	Lakeport	\$2 50
Crochet lace	Miss Nora Thompson	Lakeport .....	.....
Embroidery	Mrs. Ella Hardy.	Lakeport	\$2 50
Ornamental grasses	Miss H. A. Bole.	Kelseyville	\$2 00
Crocheting	Gertie Wayne.	Lakeport	\$2 00
Kensington painting	Mrs. W. E. Hixon.	Lakeport	\$2 50
Ornamental grasses	Mrs. D. C. Rumsey.	Lakeport .....	.....
Display of millinery	Miss Clara Chapman	Lakeport	\$5 00
Crochet scarf	Miss Belle Male	Lakeport	\$2 00
Natural preserved flowers	Miss Cammella Mackall	Lakeport	\$2 00
Water color paintings	A. Phillips	Lakeport	\$5 00
Knit lace curtains	Mrs. Simpson	Lakeport	\$2 50
Ornamental grasses	L. P. Berger	Lakeport .....	.....
Scarf in etching	Miss Stein	Lakeport	\$2 00
Applique work	Miss M. Tunis.	Lakeport	\$2 00
Drawn thread work	Mrs. Chas. Piner	Kelseyville	\$2 00
Plush ribbon work	Mrs. Hixon	Lakeport .....	.....
Chamois bag, painted	Mrs. Hixon	Lakeport	\$1 00
Painting on swiss	Mrs. Hixon	Lakeport	\$1 50
Best woven work	Mrs. Ross	Lakeport	\$2 00
Best display of paintings	Mrs. M. Arnold	Lakeport .....	.....
Largest and best display of fancy articles.	Mrs. J. Vickroy	Lakeport	\$5 00
Painting	Mrs. D. C. Rumsey.	Lakeport .....	.....
CLASS II.			
Crochet shawl	Rosa Green	Lakeport	\$2 00
Pen drawing	Eddie Dean	Ukiah	\$2 00
Embroidered skirt	Miss Sallie Christie	Lakeport	\$2 00
Four oil paintings	Edith Alexander	.....	\$2 00
Tidy	Mabel Hughes	.....	\$2 00
Apron	Willie Whittier.	.....	\$2 00

SIXTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Map of Twelfth Agricultural District	Charles Chalfant	Ukiah .....	.....
Map of Twelfth Agricultural District	Charles Mannon	Ukiah	\$10 00
Bookkeeping	Sophia Stevens	Kelseyville	\$10 00
Bookkeeping	Laura Emmerson	Upper Lake .....	.....
Penmanship	Bertha Howe	Kelseyville	\$5 00
Penmanship	Cammella Mackall	Lakeport .....	.....
Primary School exhibit	West Lake School District	.....	\$20 00
Grammar grade exhibit	Lower Lake Public School	Lower Lake .....	.....
Grammar grade exhibit	Spruce Grove District	Lower Lake .....	.....
Grammar grade exhibit	Kelseyville Dist.	Kelseyville .....	.....
Grammar grade exhibit	Excelsior District	Lower Lake	\$20 00

SEVENTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
Fruit trees	R. P. Eachus	Lakeport	\$5 00
Plaque	Mrs. M. Arnold	Lakeport	\$2 00
Pillow shams	Mrs. G. Moore	Lakeport	\$1 00
Splasher	Mrs. G. Moore	Lakeport	\$1 00
Display of soap	Mrs. M. Simpson	Lakeport	\$2 50
Hair wreath	Mrs. A. Olsen	Kelseyville	
Stuffed birds	Miss H. A. Bole	Kelseyville	\$10 00
Picture frame	Edith Alexander	Lakeport	\$1 00
Hammered work	Mrs. J. W. Mackall	Lakeport	\$2 00
Well-boring and drill machine	M. Wambold	Lakeport	\$5 00
Fruit trees	E. P. Wray	Lakeport	\$5 00
Onion sets	E. P. Wray	Lakeport	\$1 00
Berries	E. P. Wray	Lakeport	\$1 00
Brandy	Edge Hill Vineyard Company	St. Helena	Diploma.
Singer sewing machine	A. Phillips	Lakeport	Diploma.
Blackberry wine	N. T. Wooldridge	Lakeport	Diploma.
General display of drugs and perfumery	C. E. Phelan	Lakeport	\$5 00
Gourds	N. T. Wooldridge	Lakeport	
French painting	Mrs. J. W. Mackall	Lakeport	
Stock carrots	E. P. Wray	Lakeport	
Mangel-wurzel beets	E. P. Wray	Lakeport	
Display of yarn	Clara Chapman	Lakeport	
Table beets	G. Scudamore	Lakeport	\$1 00
Stock beets	E. P. Wray	Lakeport	\$1 00
Crayon paintings	Ella Hanson	Lower Lake	\$10 00
Japan persimmons	J. Mendenhall	Upper Lake	\$1 00

SPEED PROGRAMME.

TUESDAY, SEPTEMBER 18, 1888.

RACE No. 1—RUNNING.

Half mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Ito, br. s.	D. McGovern	Petaluma.
Dick Turpin, b. g.	George Lambert	Willits.
Jack Brady, b. s.	H. Stover	Petaluma.
Billy Goggins, b. s.	L. H. Redwine	Ukiah.

SUMMARY.

Dick Turpin	1
Jack Brady	2
Ito	3
Billy Goggins	4

RACE No. 2—RUNNING.

Half mile heats.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Jack Brady, b. s.	H. Stover	Petaluma.
City, s. g.	George Lambert	Willits.
St. Patrick, s. g.	D. McGovern	Petaluma.

SUMMARY.

City	1
Jack Brady	2
St. Patrick	3

RACE No. 3—TROTTING.

Mile heats.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Lancelo, blk. s.	George Ellis	Lakeport.
Doctor	T. Charlton	Ukiah.
Daniel Deronda, b. s.	J. W. Boggs	Kelseyville.

SUMMARY.

Daniel Deronda	1
Doctor	2
Lancelo	3

WEDNESDAY, SEPTEMBER 19, 1888.

RACE No. 4—RUNNING.

Five-eighth mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Cito, s. g.	Geo. Lambert	Willits.
Jim Crow, b. g.	E. R. Wright	Ukiah.
Dick Turpin, b. g.	Tom Charlton	Ukiah.
Twilight, b. m.	P. E. Smith	Lower Lake.
Lula B, b. m.	P. E. Smith	Lower Lake.
Wormwood, b. m.	W. T. Whitton	Lakeport.
Maxey Cobb, g. g.	H. F. Force	Ukiah.

SUMMARY.

Cito	1
Dick Turpin	2
Twilight	3

RACE No. 5—RUNNING.

Three-eighth mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Twilight, b. m.	P. E. Smith	Lower Lake.
Lady Washington, g. m.	W. F. Whitton	Lakeport.
Lula B, b. m.	P. E. Smith	Lower Lake.
Wormwood, b. m.	W. F. Whitton	Lakeport.
White Stockings, b. m.	B. F. Gould	Lower Lake.
Billy the Kid	J. C. Burger	Lakeport.

SUMMARY.

Billy the Kid	1
Lula B	2
White Stockings	3

RACE No. 6—TROTTING.

Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
B, b. m.	A. L. Adams	Kelseyville.
Lillie, g. m.	H. M. Kingsbury	Guinoc.
Keepstake, b. s.	L. H. Boggs	Lakeport.
Daisy P, b. m.	Geo. Ellis	Lakeport.

SUMMARY.

Keepstake	1
Lillie	dis.
B	dis.

THURSDAY, SEPTEMBER 20, 1888.

RACE No. 7—RUNNING.

Free for all. One half mile; best two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Jack Brady, b. h.	H. Stover	Petaluma.
Cito, s. g.	Geo. Lambert	Willits.
Ito, b. h.	W. H. Kelsey	Lakeport.
White Stockings, s. m.	B. F. Gould	Lower Lake.

SUMMARY.

Cito	1
Jack Brady	2
Ito	3

Time—0:50 $\frac{1}{4}$; 0:50 $\frac{1}{4}$; 0:51.

RACE No. 8—TROTTING.

Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Babe, s. m.	T. Charlton	Ukiah.
Daisy, b. m.	W. C. Helman	Ukiah.
Jim Crow, b. g.	E. R. Wright	Ukiah.
Doctor, s. g.	G. Lambert	Willits.
Maxey Cobb, g. g.	H. T. Force & Co.	Ukiah.

SUMMARY.

Jim Crow	1
Babe	2
Daisy	3

Time—3:20; 3:20 $\frac{1}{2}$; 3:10 $\frac{3}{4}$; 3:27; 3:12.

FRIDAY, SEPTEMBER 21, 1888.

RACE No. 9—RUNNING.

Three eighths of a mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Dick Turpin, b. g.	T. Charlton	Ukiah.
Billy Goggins, b. s.	T. Charlton	Ukiah.
Lula B, b. m.	P. E. Smith	Lower Lake.
Ito, b. s.	D. McGovern	Petaluma.
Twilight, b. m.	P. E. Smith	Lower Lake.

SUMMARY.

Dick Turpin	1
Lula B.	2
Ito	3

Time—0:36 $\frac{1}{2}$.

RACE No. 10—RUNNING.

Half mile heats; two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Twilight, b. m.	P. E. Smith	Lower Lake.
Wormwood, b. m.	W. T. Whitton	Lakeport.
Frank D, r. g.	L. W. Redwine	Ukiah.

SUMMARY.

Twilight.....	1
Frank D.....	2
Wormwood	3

Time—0:55; 0:56.

RACE No. 11—TROTTING.

Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Daisy, b. m.	L. G. Simmons	Lakeport.
Latoka, b. m.	H. R. Bolter	Kelseyville.
Plume, m. m.	H. M. Kingsbury	Guinoc.
Oscar Bailess, b. s.	C. R. Harrington	Lakeport.

SUMMARY.

Oscar Bailess.....	1
Latoka	2
Plume	3

Time—3:11 $\frac{1}{4}$; 3:16 $\frac{3}{4}$; 3:14 $\frac{1}{4}$.

SATURDAY, SEPTEMBER 22, 1888.

RACE No. 13—RUNNING.

Free for all. Mile heats; two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Jack Brady	H. Stover	Petaluma.
Cito	Geo. Lambert	Willits.
St. Patrick	W. H. Kelsey	Lakeport.
Oscar Wild	W. H. Kelsey	Lakeport.
Blackstone	J. T. Homer	Sacramento.

SUMMARY.

Jack Brady.....	1
Cito	2
Oscar Wild.....	3
St. Patrick.....	4

Time—1:46; 1:47 $\frac{3}{4}$.

TRANSACTIONS

OF THE

THIRTEENTH DISTRICT AGRICULTURAL ASSOCIATION

For the Year 1888,

Composed of the Counties of Sacramento, Sutter, Yolo, and Yuba.

OFFICERS OF THE ASSOCIATION.

D. E. KNIGHT.....	President.
T. J. SHERWOOD.....	Secretary.
J. J. SHAFFER.....	Treasurer.

DIRECTORS.

J. W. WILSON.....	Sacramento.
J. H. KIMBALL.....	Yuba City.
JAMES LITTLEJOHN.....	Yuba City.
C. F. REED.....	Grafton.
A. D. CUTTS.....	Marysville.
M. MARCUSE.....	Marysville.
D. E. KNIGHT.....	Marysville.
C. A. GLIDDEN.....	Marysville.

REPORT.

MARYSVILLE, November 24, 1888.

To the honorable the State Board of Agriculture:

GENTLEMEN: The Directors of the Thirteenth District Agricultural Association submit this, their report of the transactions of said association, for the year ending this date.

T. J. SHERWOOD, Secretary.

RECEIPTS AND EXPENDITURES.

1888.		Receipts.	
Jan. 1—	By cash on hand.....	\$355	21
Aug. 23—	By advertising in premium list.....	60	00
Sept. 1—	By subscriptions.....	1,625	64
	By entrance to races.....	1,610	00
	By donated premiums.....	228	00
	By pavilion receipts.....	521	40
	By gate receipts.....	1,295	75
	By pool privilege.....	313	00
	By wagon tickets.....	56	00
	By quarter badges.....	30	00
	By State appropriation.....	2,000	00
	By President Knight (donated).....	272	89
			<u>\$8,367 89</u>
1888.		Expenditures.	
Jan. 1—	Paid Mrs. M. A. Lynch for lost handkerchief.....	\$25	00
Jan. 1—	Paid advertising for lost handkerchief.....	4	80
April 28—	Paid National Association dues and sundry bills.....	403	20
Sept. 1—	Paid purses for races.....	4,281	00
	Paid premiums on exhibits.....	2,029	50
	Paid labor at fair grounds.....	370	00
	Paid labor at pavilion.....	315	15
	Paid printing and advertising.....	335	15
	Paid rent, light, music, etc.....	281	70
	Paid sundry expenses, posting, etc.....	33	50
	Paid sundry bills by D. E. Knight.....	288	89
			<u>\$8,367 89</u>

EXHIBITS AT THE FAIR—1888.

LIVE STOCK DEPARTMENT.

Name of Animal.	Owner.	Address.
CLASS I—THOROUGHBREDS.		
Monarch, stallion	J. B. Ramsey	Meridian.
Sutter Maid, mare	J. B. Ramsey	Meridian.
Emma D, suckling colt.	J. B. Ramsey	Meridian.
CLASS II—GRADED HORSES.		
Gus Payne, stallion, seven years old	J. B. Ramsey	Meridian.
Alhambra, stallion, two years old	P. McCune	Yuba City.
Banquet, stallion, two years old	C. F. Lucas	Marysville.
Yuba Maid, mare, eighteen years old	F. E. Griffith	Marysville.
Minnie O, filly, two years old	W. C. Ogden	Marysville.
May C, filly, two years old	P. Coats	Yuba City.
Avalanche, stallion, one year old	F. E. Griffith	Marysville.
Allie Wilkes, filly, one year old	P. Coats	Yuba City.
Alpha, yearling filly	J. J. McGrath	Marysville.
CLASS III—HORSES OF ALL WORK.		
Frank, stallion, four years old	J. M. Cutts	Marysville.
Granger, stallion, seven years old	Samuel Harding	Marysville.
Nellie R, mare, eleven years old	S. E. Inlow	Marysville.
Ida, mare, six years old	C. A. Glidden	Marysville.
CLASS IV—DRAUGHT HORSES.		
Stonewall, stallion, seven years old	C. A. Glidden	Marysville.
Jumbo, stallion, eight years old	R. W. Tharp	Yuba City.
Young Nell, mare, three years old	C. Matthews	Marysville.
Belle, mare, seven years old	C. A. Glidden	Marysville.
CLASS V—ROADSTERS.		
Alcantare, stallion, six years old	J. B. Ramsey	Meridian.
Challenge, stallion, fifteen years old	George Ohleyer	Yuba City.
Billy, gelding, four years old	William Doty	Meridian.
Ginger, gelding, five years old	P. McCune	Yuba City.
Esmeralda, mare, eight years old (special)	Suel Harris	Yuba City.
Racket, mare, graded, six years old (special)	James Nesbitt	Yuba City.
Alcantare, stallion and family of five colts	J. B. Ramsey	Meridian.
Queen of Sutter, filly, two years old	George Ohleyer	Yuba City.
CLASS VI—CARRIAGE HORSES.		
Jake and Seymour, span of matched carriage horses	M. Marcuse & Co.	Marysville.
Dolly, single carriage mare	J. B. Ramsey	Meridian.
CLASS VIII—SADDLE HORSES.		
Daisy, gelding, eight years old	C. A. Glidden	Marysville.
Doctor, gelding, six years old	S. E. Inlow	Marysville.
CLASS IX—COLTS.		
Roderick	S. E. Inlow	Marysville.
Jenny	S. E. Inlow	Marysville.
Betty	C. A. Glidden	Marysville.
Morgan	C. A. Glidden	Marysville.
CLASS X—SWEEPSTAKES.		
Monarch, stallion, six years old	J. B. Ramsey	Meridian.
Emma R, mare, seven years old	P. Coats	Yuba City.

LIVE STOCK DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
CLASS XI—MULES.		
Dandy, mule, one year old	George Ohleyer	Yuba City.
John, jack, seven years old	E. H. Gould	Honcut.
Emma, jenny, six years old	E. H. Gould	Honcut.
CLASS XII—DURHAM CATTLE.		
Red King, bull, three years old	J. Peters	Nicolaus.
Young Creasant, bull, one year old	J. Peters	Nicolaus.
Lucy, cow, eight years old	J. Peters	Nicolaus.
Grace, cow, five years old	J. Peters	Nicolaus.
Stonewall, bull calf, three months old	J. Peters	Nicolaus.
Bismarck, bull calf	J. Peters	Nicolaus.
Topsy, heifer calf, three months old	J. Peters	Nicolaus.
Jennie, heifer calf	J. Peters	Nicolaus.
CLASS XIII—JERSEYS.		
Reuben B, five years old	J. Proper	Yuba City.
Arthur, bull, four years old	V. C. Putman	Marysville.
Jersey Bell, cow, six years old	J. Greely	Marysville.
Marysville Beauty, cow, two years old	J. Greely	Marysville.
Rose Queen, cow, four years old	C. Matthews	Marysville.
Pride of Yuba, calf, nine months old	J. Greely	Marysville.
CLASS XVIII—HOLSTEINS.		
King Wm. 2d, bull, three years old	J. H. Kimball	Marysville.
Alf, bull, one year old	R. C. Kells	Yuba City.
Dandy, bull calf	R. Hall & Son	Meridian.
Lady Kooman, cow, three years old	R. C. Kells	Yuba City.
Viega Rucker, cow, eight years old	R. Hall & Son	Marysville.
Olinet, cow, two years old	R. C. Kells	Yuba City.
Black Dona, A. Angus, yearling heifer	J. H. Kimball	Yuba City.
Mary Jane, A. Angus heifer	J. H. Kimball	Yuba City.
Anna Jane, Holstein heifer	J. H. Kimball	Yuba City.
Young Lee, Holstein heifer	J. H. Kimball	Yuba City.
Emma, A. Angus yearling	J. H. Kimball	Yuba City.
Sutterman, bull calf (special)	R. C. Kells	Yuba City.
H. Angelo, bull calf	R. C. Kells	Yuba City.
Black Prince, graded bull calf (special)	Frank Miner	Marysville.
Nell, heifer calf five months old	A. W. Lewis	Marysville.
Queen, graded bull calf (special)	R. Hall & Son	Marysville.
Rose, bull calf (special)	R. Hall & Son	Marysville.
CLASS XIX—HERDS.		
Herd of Holsteins	R. C. Kells	Yuba City.
Herd of Durhams	J. Peters	Nicolaus.
Herd of Aberdeen Angus	J. H. Kimball	Yuba City.
CLASS XXII—MERINO SHEEP.		
Ram, two years old	J. Proper	Yuba City.
Pen of five ewes, one year old	J. Proper	Yuba City.
Three lambs	J. Proper	Yuba City.
Ram, one year old	John McAlpine	Yuba City.
Ram, one year old	John McAlpine	Yuba City.
Pen of three rams	John McAlpine	Yuba City.
Three ram lambs	John McAlpine	Yuba City.
CLASS XXVI—BERKSHIRE SWINE.		
Boar, two years old	C. Matthews	Marysville.
Boar, six months old	C. Matthews	Marysville.
Sow, two years old	R. C. Kells	Yuba City.
Sow, two years old	John McAlpine	Yuba City.
Sow, six months old	C. Matthews	Marysville.
Eight pigs	John McAlpine	Yuba City.
Pair of pigs, six months old	C. Matthews	Marysville.
Two pigs, six months old	James Farrell	Marysville.
Boar, eight months old	R. C. Kells	Yuba City.

TRANSACTIONS OF THE
LIVE STOCK DEPARTMENT--Continued.

Name of Animal.	Owner.	Address.
CLASS XXVIII—POLAND-CHINA SWINE.		
Sow, two years old	R. C. Kells	Yuba City.
Sow, six months old	R. C. Kells	Yuba City.
Sow	James Farrell	Marysville.
Pigs, with sow	James Farrell	Marysville.
Pigs	R. C. Kells	Yuba City.
Boar, eight months old	R. C. Kells	Yuba City.
CLASS XXX—POULTRY.		
Houdans and Silver-Spangled Hamburgs	Mrs. James Taylor	Marysville.
W. F. B. Spanish and Brown Leghorns	Mrs. W. A. Wederein	Marysville.
Blue Leghorn chicks	Mrs. M. Mahony	Marysville.
White Leghorn chicks	Mrs. A. Devolt	Marysville.
Game chickens, three varieties	W. M. Jefferds	Browns Valley.
White Pile and Black Spanish	W. M. Jefferds	Browns Valley.
Bronze turkeys	Mrs. E. Matthews	Marysville.
Japanese Game fowls	Joseph Bradley	Marysville.
Brown Leghorn chicks	Andrew Bligh	Marysville.
Shanghai chickens	Henry Bahrenberg	Marysville.
Partridge Cochins and Cayuga ducks	Mrs. M. Farrell	Marysville.
Bronze turkeys and geese	Mrs. M. Farrell	Marysville.
Hamburg chickens	Henry Hyde	Marysville.
Spanish chickens	May Santry	Marysville.
Ducks and Bantam chicks	Allan Pinkard	Yuba City.
Wyandottes, Langshans, and Game	W. H. Plymire	Marysville.
Bantam chickens	Charles Swezey	Marysville.
White Leghorns and Plymouth Rocks	E. Brow	Marysville.
Blue Leghorns	W. M. Davidson	Marysville.
Two kinds of turkeys	J. H. Wise	Marysville.
Langshans and White Leghorns	R. C. Kells	Yuba City.
Plymouth Rocks and chicks	R. C. Kells	Yuba City.
Bronze turkeys and White geese	D. McGrath	Marysville.
Two tame deer	J. G. Robertson	Marysville.

PREMIUMS AWARDED—1888.

MISCELLANEOUS DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
Best general display of fruit of all kinds.	Abbott & Phillips	Yuba City	Dip., \$30
Second largest exhibit of dried fruit.	Abbott & Phillips	Yuba City	\$10 00
First on apples, peaches, and plums	Abbott & Phillips	Yuba City	\$25 00
First on dried peaches, prunes, and figs.	Abbott & Phillips	Yuba City	\$13 00
Second on pears, nectarines, and plums	Abbott & Phillips	Yuba City	\$8 00
Second on tobacco and apricots	Abbott & Phillips	Yuba City	\$6 00
Best and largest exhibit of grapes.	J. P. Onstott	Yuba City	Dip., \$30
First on table grapes, wine grapes, and seedless	J. P. Onstott	Yuba City	\$25 00
First on three varieties of apples and three varieties of pears.	J. P. Onstott	Yuba City	\$10 00
First on plums, and second on figs	J. P. Onstott	Yuba City	\$7 00
First on general display of nuts	T. B. Hull	Yuba City	Dip., \$10
First on soft and hard shell almonds	T. B. Hull	Yuba City	\$8 00
First on hardy and Snowflake wheat	T. B. Hull	Yuba City	\$3 00
First on alfalfa seed and Egyptian corn	T. B. Hull	Yuba City	\$6 00
First on best three varieties of peaches	T. B. Hull	Yuba City	\$5 00
Second on general exhibit of wheat	T. B. Hull	Yuba City	\$10 00
Second on club wheat, barley, and melons	T. B. Hull	Yuba City	\$10 00
Third on English walnuts and plums	T. B. Hull	Yuba City	\$3 00
Third on general display of fruit	T. B. Hull	Yuba City	\$10 00
Third on six varieties of apples and pears	T. B. Hull	Yuba City	\$5 00
Second best general display of fruit	Mrs. R. Keck	Yuba City	Dip., \$20
First on six varieties of pears	Mrs. R. Keck	Yuba City	\$10 00
First on Havana tobacco, squashes, and melons	Mrs. R. Keck	Yuba City	\$8 00
First on English walnuts and seeds	Mrs. R. Keck	Yuba City	\$5 00
Second on six varieties of apples	Mrs. R. Keck	Yuba City	\$5 00
Second on green and dried figs	Mrs. R. Keck	Yuba City	\$3 00
Third on peaches, plums, and prunes	Mrs. R. Keck	Yuba City	\$7 00
Best general exhibit of melons, etc.	Mrs. R. Keck	Yuba City	\$10 00
First on nectarines, and second on peaches	B. G. Stabler	Yuba City	\$10 00
Third on dried fruit, melons, etc.	B. G. Stabler	Yuba City	\$13 00
Third largest exhibit of grapes	William Stafford	Yuba City	\$10 00
Second on table grapes	William Stafford	Yuba City	\$5 00
Third on raisin grapes	William Stafford	Yuba City	\$3 00
Special mention for quality	William Stafford	Yuba City	
First on job, book, and card printing	"Appeal" Pub. Co.	Marysville	\$15 00
Special on scrap book collection	Edna Anderson	Marysville	\$1 00
Special on painted banners and flowers	Malinda Aulman	Marysville	\$4 00
First on graham bread	Mrs. E. Brow	Marysville	\$3 00
Special on wheat bread	Miss T. Bligh	Marysville	\$1 00
First on flowering plants, luster paintings, etc.	Mrs. J. C. Bradley	Marysville	\$13 00
First on flour, meal, and best exhibit	Buckeye Mill Co.	Marysville	Dip., \$30
First on open buggy, market wagon, etc.	S. H. Bradley	Marysville	\$23 00
First on California-made paper	Blake, Moffitt & Co.	San Francisco	Dip., \$3
Best exhibit of California-made cheese	John Burns	Nicolaus	Dip., \$10
Second on card printing	A. L. Brown	Marysville	\$1 00
Fourth on self-made calico dress	Lota Best	Yuba City	\$2 00
Third best three varieties of apples	Paris Bean	Brownsville	\$2 00
Painted panels, etc., special	Kittie Barnes	Marysville	\$1 00
Best exhibit of oil paintings	Mrs. S. S. Boynton	Oroville	Diploma.
Special on paper flowers	Mrs. M. Brow	Marysville	\$1 00
First on wheat bread; second on preserves, etc.	Mrs. D. Coughlan	Marysville	\$8 00
First on cut flowers	Mrs. M. C. Clark	Yuba City	\$3 00
First on Irish and sweet potatoes and best exhibit	A. J. Cumberson	Marysville	\$7 00

MISCELLANEOUS DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Hand-made apron, by self (special)	Miss Katie Cutts	Marysville	\$1 00
Hand-made dress, by self (special)	Miss Louisa Cutts	Marysville	\$1 00
Best exhibit of fancy and washing soap	Capital Soap Works	Sacramento	Diploma.
Special on painted plaques, etc.	Miss A. Clemnor	Yuba City	\$1 00
Special on paintings, waxwork, etc.	College of Notre Dame	Marysville	\$7 00
Special on braid pillow shams	Mrs. N. Cohn	Marysville	\$1 00
Third on rare and ornamental plants	Mrs. A. Devolt	Marysville	\$2 00
First on broom corn, egg plant, cabbage, etc.	Mrs. E. M. Devoe	Marysville	\$10 00
Third on seedless grapes	R. Davis	Yuba City	\$2 00
Second on bread and cake	Miss Carrie Erich	Marysville	\$4 00
First on fancy cake	Miss Josie Efken	Marysville	\$3 00
Second on biscuit	Miss Etta Efken	Marysville	\$1 00
First on silverware, clocks, etc.	Peter Engel & Co.	Marysville	\$15 00
Special on paper flowers, etc.	Miss A. Englund	Marysville	\$1 00
Special on paintings, plaques, etc.	Mrs. W. Englund	Marysville	\$3 00
Third on wheat bread and cake	Estella Farmer	Yuba City	\$2 00
Special on calico dress, her make	Irene Fuller	Marysville	\$1 00
Special on pomegranates	Miss May Fisher	Marysville	\$1 00
First on parlor set, bed, chairs, and exhibit	Frost & Shaffer	Marysville	\$21 00
First on clothing, hats, caps, dry goods, etc.	B. F. Gilman	Yuba City	\$30 00
First on squashes	J. W. Giblin	Yuba City	\$1 00
Special on tidy, etc.	Miss Bessie Gray	Marysville	\$1 00
First on yeast powders, banners, panels, etc.	Mrs. F. E. Griffiths	Marysville	\$10 00
Special on paintings	Miss C. Gottwals	Yuba City	\$2 00
Special on painted banners, etc.	Mrs. J. H. Gladden	Yuba City	\$2 00
Special on paintings	George Gee	Yuba City	\$1 00
Third on soda biscuit, and scrap book	Corinne Hulburt	Marysville	\$2 00
Second on cake, and special on fancy work, etc.	Miss Lettie Heyl	Marysville	\$5 00
First on cake, corn bread, and biscuit	Miss Jessie Hull	Yuba City	\$6 00
First on preserves, jams, pickles, and fruit	Mrs. T. B. Hull	Yuba City	\$18 00
Second on cut flowers	Mrs. Dora Hopkins	Marysville	\$2 00
Special on watermelons	J. E. Healy	Marysville	\$1 00
Special on California wine	Joseph Holloman	Marysville	\$1 00
Special on fancy needlework	Miss T. Hogan	Marysville	\$2 00
Special on calico dress, by self	Miss Daisy Heyl	Marysville	\$1 00
First on Chili Club wheat in stalk	Hastings Brothers	Yuba City	\$3 00
Second on white Chili wheat	H. B. Heiken	Yuba City	\$3 00
First on exhibit of groceries, etc.	Hapgood & Syfert	Marysville	\$35 00
Special on painted plaques, etc.	Miss Maud Hyde	Marysville	\$1 00
Special on painted panels, etc.	Mrs. J. Heyl	Marysville	\$2 00
Special on oil paintings	A. Harney	Marysville	\$1 00
Special on oil paintings	Mrs. A. J. Haukins	Brownsville	\$3 00
Second on exhibit of oil paintings	Mrs. W. W. Holland	Marysville	\$10 00
First on jellies, second on nuts and display	Mrs. C. N. Jenkins	Marysville	\$10 00
First on rare plants, second on ornamental plants	Mrs. F. W. Johnson	Marysville	\$8 00
First on raisin grapes	J. G. Jones	Brownsville	\$10 00
First on blackberries, second on apples	Wm. Jones	Brownsville	\$6 00
First on lemons of 1887	Mrs. Mary Karr	Marysville	\$5 00
First on road and breaking cart	Katzner, Russell & Chase	Marysville	\$4 00
Third on wheat bread	Miss J. Long	Marysville	\$2 00
First on cocoons	A. W. Lewis	Marysville	Dip., \$5 00
Special on painted plaques	Miss L. Lordly	Brownsville	\$2 00
First on musical instruments, stationery, etc.	Miller & Hall	Marysville	\$20 00
First on exhibit, \$100; first on blankets, \$5	Marysville Woolen Mill	Marysville	\$105 00
First on flannel, tweeds, underwear, wool	Marysville Woolen Mill	Marysville	\$18 00
First on butter, bread, and general exhibit of butter	Mrs. E. Matthews	Marysville	\$21 00

MISCELLANEOUS DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Third on flowering plants	Mrs. Sarah C. McKinney	Marysville	\$1 00
Exhibit of dental work	J. E. Moore	Marysville	Dip.,\$5 00
First on self-made calico dress	Agnes Moran	Marysville	\$5 00
Second on soft shell almonds	M. McAuslin	Yuba City	\$3 00
Second on white Chili wheat	James Murry	Yuba City	\$3 00
First on Canada wheat in stalk	C. E. Moore	Yuba City	\$3 00
Ship, in glass, special	Miss K. Norton	Yuba City	\$1 00
Special on corn bread	Fannie Owens	Yuba City	\$2 00
First on exhibit of wheat, oats, barley, etc.	D. A. Ostrom	Reeds Station	Dip.,\$18.
Special for group of paintings	Miss May Ostrom	Reeds Station	\$2 00
First on statuary, plants, etc.	W. H. Plymire	Marysville	\$4 00
First on sugar beets and squashes	Geo. W. Peacock	Marysville	\$2 00
First on Proper wheat; first in stalk	Mrs. E. Proper	Yuba City	\$8 00
Special on landscape painting, etc.	Mrs. W. T. Phipps	Yuba City	\$3 00
Special on flowering plants and collection of flowers	Miss Eda Ruts	Yuba City	\$5 00
Special on painted banner, etc.	Miss Irene Rush	Yuba City	\$1 00
Second on boy's suit, home-made	Mrs. J. P. Swift	Marysville	\$2 00
First on boy's suit, home-made	May Sautry	Marysville	\$3 00
First on foot mats made of rags	Miss May Sutliff	Marysville	\$2 00
First on biscuit, raised	Mrs. A. C. Spiers	Marysville	\$3 00
First on canned fruit and display	Sutter Packing and Canning Co.	Yuba City	\$20 00
Special on hand sewing, etc.	Gracie Saviers	Marysville	\$1 00
Special on hand sewing, etc.	Marcia Saviers	Marysville	\$1 00
Special on crochet underwear	Frances Scott	Marysville	\$1 00
Special on calico dress	Lottie Smith	Marysville	\$1 00
Third on Proper wheat; second on barley	Thomas Smith	Marysville	\$4 00
Special on dried figs	Miss M. Sluman	Marysville	\$1 00
Special on exhibit of paintings	Mrs. N. J. Saviers	Marysville	\$5 00
Special on exhibit of paintings	Mrs. R. W. Skinner	Marysville	\$3 00
Special on painted panels, etc.	Mrs. G. W. Stephens	Marysville	\$2 00
Special on painted robe	Flora Stice	Marysville	\$1 00
General exhibit of penmanship	Stockton Business College	Stockton	Diploma.
Special on crochet bedspread	Mrs. M. Schwab	Marysville	\$1 00
First on biscuits, calico dress, and cake	Jennie Tucker	Marysville	\$6 00
First on honey, first on beehive, and hardy wheat	Wm. Thompson, Jr.	Yuba City	\$9 00
Second on honey, seedless grapes, and bunch grapes	Wm. Thompson, Sr.	Yuba City	\$7 00
Special on display of fruit in glass	Belle Todd	Live Oak	\$2 00
Special on exhibit of hops	J. F. Tapley	Yuba City	\$5 00
Second best exhibit of grapes and raisin grapes	George Thompson	Yuba City	\$25 00
Third on Salt Lake Club wheat	N. F. Todd	Live Oak	\$2 00
First on Snowflake wheat	N. F. Todd	Live Oak	\$5 00
First on exhibit of fruit in glass	Mrs. A. B. Van Arsdale	Yuba City	Dip.,\$10.
Special on minerals, coins, etc.	Mrs. A. B. Van Arsdale	Yuba City	\$4 00
Special on green oranges	A. B. Van Arsdale	Yuba City	Diploma.
Special on kensington paintings	Mrs. Geo. Van Buskirk	Marysville	\$1 00
Second on biscuit	Mrs. W. A. Wimberly	Marysville	\$2 00
First on exhibit of bread	Mrs. W. Wedderein	Marysville	\$5 00
Third on pickles, quilts, etc.	Mrs. D. Walters	Marysville	\$4 00
Special on squashes, tomatoes, and melons	J. H. Wise	Marysville	\$3 00
Best exhibit of hardware, glassware, etc.	White, Cooley & Cutts	Marysville	Dip.,\$30.
First on range, stove, kitchen goods, etc.	White, Cooley & Cutts	Marysville	\$35 00
First on pulverizers, two sizes	Weinstock, Lubin & Co.	Sacramento	Diploma.
Basket of paper flowers	Etta Wenzel	Marysville	\$1 00

SPEED PROGRAMME.

TUESDAY, AUGUST 28, 1888.

RACE NO. 1—TROTTING.

For two-year old colts owned in the Third, Thirteenth, or Seventeenth Districts. Purse, two hundred dollars. One hundred dollars to first horse; fifty dollars to second; thirty dollars to third; twenty dollars to fourth. Mile heats; best two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Annie E, b. f., by Tilton Almont.....	W. R. Merrill	Willows.
Tart, b. g., by Tilton Almont.....	W. M. Billups.....	Colusa.

SUMMARY.

Annie E	1
Tart.....	2

Time—2:58; 2:59.

RACE NO. 2—RUNNING.

For two-year old colts owned in the Third, Thirteenth, or Seventeenth Districts. Purse, two hundred dollars. One hundred dollars to first horse; fifty dollars to second; thirty dollars to third; twenty dollars to fourth. Half mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Almont, b. c., by Three Cheers.....	W. M. Murry	Sacramento.
St. Leger, b. s., by Joe Hooker.....	J. F. Holland	Chico.

SUMMARY.

Almont	1
St. Leger.....	2

Time—0:52½.

RACE NO. 3—TROTTING.

3:00 Class. For all horses eligible. Purse, two hundred and fifty dollars. One hundred and twenty-five dollars to first horse; sixty-two dollars and fifty cents to second; thirty-seven dollars and fifty cents to third; twenty-five dollars to fourth. Best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
The Dude, by Golddust.....	J. R. Hodson	Sacramento.
Millboy, by Brigadier.....	J. Greely	Marysville.
Argent, by Sterling.....	R. H. Walton	San José.
Knighthood, by Brigadier.....	D. E. Knight	Marysville.
Bell C, by Tilton Almont.....	F. G. Crawford	Willows.
Surgeon, by Brigadier.....	Frank Grant	Marysville.
Patchwork, by Brigadier.....	Charles Raish	Marysville.
Sunflower, by Elmo.....	W. H. Seale	Mayfield.
Fedora, by Brigadier.....	J. B. McDonald	Marysville.
Cricket, by Brigadier.....	A. L. Hinds	San Francisco.
Fred L, by Black Eagle.....	J. E. King.....	Woodland.
Blockade, by Signal.....	M. Biggs, Jr.	Biggs.

SUMMARY.

Sunflower	1
The Dude	2
Cricket	3
Argent	4

All the others distanced on the first heat.

Time—2:29½; 2:31; 2:33; 2:32; 2:36; 2:37; 2:40.

WEDNESDAY, AUGUST 29, 1888.

RACE No. 4—TROTTING.

2:35 Class. For all horses eligible. Purse, three hundred dollars. One hundred and fifty dollars to first horse; seventy-five dollars to second; forty-five dollars to third; thirty dollars to fourth. Best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Eva W, by Nutwood	S. C. Tryon	 Sacramento.
Cricket, by Brigadier	A. L. Hinds	 San Francisco.
Lohengrin, by Echo	J. W. Dowell	 Marysville.

SUMMARY.

Eva W	1
Lohengrin	2
Cricket	3

Time—2:34; 2:34; 2:36; 2:36; 2:36½.

RACE No. 5—RUNNING.

For all horses owned in this State. Purse, two hundred dollars. One hundred dollars to first horse; fifty dollars to second; thirty dollars to third; twenty dollars to fourth. Half mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Peregrine, by Joe Hooker	W. M. Murry	 Sacramento.
Little Cap, unknown	J. W. Dowell	 Marysville.
Minnie R, by Scamperdown	E. Flitner	 Lone.
Menlo, by Young Prince	M. McCrimmon	 Lincoln.
San Luis Obispo, by St. Louis	J. H. Stevens	 Chico.
Little Dick, by Eleck	C. F. Silver	 Fremont.
Heenan, by Norfolk	M. Biggs, Jr.	 Biggs.

SUMMARY.

Peregrine	1
Minnie R	2
Little Cap	3
Menlo	4

Time—0:48½; 0:49.

RACE No. 6—TROTTING.

Three-year old Class. For all horses eligible. Purse, three hundred dollars. One hundred and fifty dollars to first horse; seventy-five dollars to second; forty-five dollars to third; thirty dollars to fourth. Best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Yolland, by Mambrino Wilkes.....	L. E. Yates.....	Haywards.
Balkan, by Mambrino Wilkes.....	A. L. Hinds.....	San Francisco.
Director H, by Director.....	S. Harris.....	Yuba City.
Gossiper, by Simmons.....	C. A. Durfee.....	Los Angeles.
Langmont, by Tilton Almont.....	W. M. Billups.....	Colusa.
W W, by Tilton Almont.....	W. R. Merrill.....	Willows.

SUMMARY.

Balkan.....	1
Gossiper.....	2
Balance distanced first heat.	

Time—2:31 $\frac{3}{4}$; 2:32; 2:34 $\frac{3}{4}$; 2:37 $\frac{1}{2}$.

THURSDAY, AUGUST 30, 1888.

RACE No. 7—TROTTING.

2:27 Class. For all horses eligible. Purse, six hundred dollars. Three hundred dollars to first horse; one hundred and fifty dollars to second; ninety dollars to third; sixty dollars to fourth. Best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Hazel Kirke, by Brigadier.....	J. B. McDonald.....	Marysville.
Ed, by Erwin Davis.....	A. T. Jackson.....	Stockton.
Artist, by Golddust.....	J. R. Hodson.....	Sacramento.
Don Tomas, by Del Sur.....	C. A. Durfee.....	Los Angeles.
Wallace G, by Plumas.....	P. Garrett.....	Chico.
Alpheus, by Mambrino Wilkes.....	A. L. Hinds.....	San Francisco.
Ha Ha, by Nephew.....	Houser & Soule.....	Ione.

SUMMARY.

Don Tomas.....	1
Ed.....	2
Ha Ha.....	3
Hazel Kirke.....	4
Artist.....	5

Time—2:29 $\frac{1}{2}$; 2:31; 2:28 $\frac{1}{2}$.

RACE No. 8—TROTTING.

Ayers Stake. For all colts sired by Alpheus; one year old. Purse, one hundred and fifty dollars. Entrance added; evenly divided as per rules. One mile heat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Springbok, by Alpheus.....	D. E. Knight.....	Marysville.
Allie Wilkes, by Alpheus.....	Polk Coats.....	Yuba City.
Avalanche, by Alpheus.....	F. E. Griffiths.....	Marysville.

SUMMARY.

Allie Wilkes	1
Avalanche	2
Springbok	3

Time—4:10.

RACE No. 9—PACING.

2:20 Class. For all horses eligible. Purse, four hundred dollars. Two hundred dollars to first horse; one hundred dollars to second; sixty dollars to third; forty dollars to fourth. Best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
George Wapple, by Brigadier	Charles Sherman	Susanville.
Bracelet, by Nephew	J. R. Hodson	Sacramento.
Pocahontas, by Washington	S. C. Tryon	Sacramento.
Almont Patchen, by Juanito	W. M. Billups	Colusa.

SUMMARY.

Almont Patchen	1
Bracelet	2
Pocahontas	3

Time—2:27½; 2:22½; 2:27½.

FRIDAY, AUGUST 31, 1888.

RACE No. 10—TROTTING.

2:40 Class. For all horses eligible. Purse, three hundred dollars. One hundred and fifty dollars to first horse; seventy-five dollars to second; forty-five dollars to third; thirty dollars to fourth. Best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Argent, by Sterling	R. H. Walton	San José.
Lohengrin, by Echo	J. W. Dowell	Marysville.
Cricket, by Brigadier	A. L. Hinds	San Francisco.
Maxwell, by William Tell	C. H. Lawrence	Chico.
Millboy, by Brigadier	J. Greely	Marysville.
The Dude, by Gold dust	J. R. Hodson	Sacramento.

SUMMARY.

Lohengrin	1
Argent	2
Maxwell	3

Time—2:32; 2:32½; 2:35½; 2:37; 2:36.

RACE NO. 11—RUNNING.

For all horses owned in this State. Purse, two hundred dollars. One hundred dollars to first horse; fifty dollars to second; thirty dollars to third; twenty dollars to fourth. One mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Menlo, by Joe Hooker	M. McCrimmon	Lincoln.
Minnie R, by Scamperdown	E. Flitner	Ione.
Adonis, by Joe Hooker	S. C. Tryon	Sacramento.
Heenan, by Norfolk	M. Biggs, Jr.	Biggs.
Peregrine, by Joe Hooker	W. M. Murry	Sacramento.

SUMMARY.

Peregrine	1
Minnie R	2
Menlo	3
Adonis	4
Heenan	5

Time—1:44½.

RACE NO. 12—TROTTING.

2:50 Class. Purse, three hundred dollars. One hundred and fifty dollars to first horse; seventy-five dollars to second; forty-five dollars to third; twenty dollars to fourth. Best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Balkan, by Mambrino Wilkes	A. L. Hinds	San Francisco.
Fred L, by Black Eagle	J. E. King	Woodland.
Sunflower, by Elmo	W. H. Seale	Mayfield.
Fedora, by Brigadier	J. B. McDonald	Marysville.
Belle C, by Tilton Almont	F. G. Crawford	Willows.
Gossiper, by Simmons	C. A. Durfee	Los Angeles.
Blockade, by Signal	M. Biggs, Jr.	Biggs.

SUMMARY.

Gossiper	1
Sunflower	2
Blockade	3

Time—2:33; 2:32; 2:35; 2:31½.

SATURDAY, SEPTEMBER 1, 1888.

RACE NO. 13—TROTTING.

2:30 Class. For all horses eligible. Purse, four hundred dollars. Two hundred dollars to first horse; one hundred dollars to second; sixty dollars to third; forty dollars to fourth. Best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Hazel Kirke, by Brigadier	J. B. McDonald	Marysville.
Alpheus, by Mambrino Wilkes	A. L. Hinds	San Francisco.
Eva W, by Nutwood	S. C. Tryon	Sacramento.
Eros, by Electioneer	W. H. Vioget	San José.
Jim L, by Dan Vorkins	J. A. Linscott	Watsonville.

SUMMARY.

Jim L.....	1
Hazel Kirke.....	2
Alpheus.....	3
Eva W.....	4

Time—2:30½; 2:30½; 2:30; 2:29¼.

RACE NO. 14—RUNNING.

For all horses owned in this State. Purse, three hundred dollars. One hundred and fifty dollars to first horse; seventy-five dollars to second; forty-five dollars to third; thirty dollars to fourth. One mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Menlo, by Young Prince.....	M. McCrimmon.....	Lincoln.
Mettie Moak, by Glencoe.....	J. F. Holland.....	Chico.
Heenan, by Norfolk.....	M. Biggs, Jr.....	Biggs.
J M R, by imp. Kelpie.....	W. M. Murry.....	Sacramento.

SUMMARY.

Menlo.....	1
J M R.....	2

The others were distanced on the first heat.

Time—1:47; 1:45; 1:48.

RACE NO. 15—MIXED.

Special made-up race for trotters and pacers. Purse, three hundred dollars. One hundred and fifty dollars to first horse; seventy-five dollars to second; forty-five dollars to third; thirty dollars to fourth. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Belle C (trotter).....	P. P. Brooks.....	Sacramento.
Johnny Skelton (pacer).....	J. R. Hodson.....	Sacramento.
George Wapple (pacer).....	C. Sherman.....	Susanville.
Maxwell (trotter).....	C. H. Lawrence.....	Chico.

SUMMARY.

Johnny Skelton.....	1
George Wapple.....	2
Maxwell.....	3

Time—2:33½; 2:41½; 2:34½; 2:48½.

RACE No. 16—TROTTING.

Special Consolation Race for horses defeated in Three-minute Race. Purse, two hundred dollars; divided as usual. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Fedora, by Brigadier	J. B. McDonald	Marysville.
Millboy, by Brigadier	J. Greely	Marysville.
Knighthood, by Brigadier	D. E. Knight	Marysville.
Patchwork, by Brigadier	C. Raish	Marysville.

SUMMARY.

Fedora	1
Patchwork	2

Time—2:42; 2:46; 2:47; 2:48 $\frac{3}{4}$.

TRANSACTIONS

OF THE

FOURTEENTH DISTRICT AGRICULTURAL ASSOCIATION

For the Year 1888,

Composed of the County of Santa Cruz.

OFFICERS OF THE ASSOCIATION.

F. A. HIHN	President.
OSCAR L. GORDON	Secretary.
JESSE COPE	Treasurer.

DIRECTORS.

F. A. HIHN	Santa Cruz.
J. F. CUNNINGHAM	Boulder.
O. H. WILLOUGHBY	Watsonville.
A. NOBLE	Soquel.
D. W. GROVER	Santa Cruz.
J. H. LOGAN	Santa Cruz.
H. MELL	Santa Cruz.
L. K. BALDWIN	Santa Cruz.

REPORT.

DECEMBER 1, 1888.

To the honorable the State Board of Agriculture:

GENTLEMEN: The Directors of the Fourteenth District Agricultural Association submit this, their report of the transactions of said association, for the year ending this date.

OSCAR L. GORDON, Secretary.

RECEIPTS AND EXPENDITURES.

Receipts.

From entrance fees and sale of tickets	\$380 00	
From privileges	35 00	
From sale of fruits	4 00	
From State warrant	750 00	
		<u>\$1,169 00</u>

Expenditures.

Paid premiums	\$656 00	
Paid labor and other expenses	403 79	
Paid interest	10 50	
Balance on hand	98 71	
		<u>\$1,169 00</u>

EXHIBITS AT THE FAIR—1888.

FIRST DEPARTMENT.

Name of Animal.	Owner.	Address.
CLASS I—STALLIONS—FULL BLOOD.		
Solide, three years old or over	Martin Kinsley	Santa Cruz.
Mederic, three years old or over	Martin Kinsley	Santa Cruz.
HORSES OF ALL WORK.		
Span of mares	F. A. Hihn	Santa Cruz.
Span of mares	Martin Kinsley	Santa Cruz.
Single horse	A. Noble	Soquel.
BROOD MARES.		
Single entry	F. A. Hihn	Santa Cruz.
Single entry	I. Gray	Soquel.
COLTS.		
Two years old	Bert. Chace	Santa Cruz.
Two years old	F. A. Hihn	Santa Cruz.
Suckling colts	F. A. Hihn	Santa Cruz.
Suckling colts	I. Gray	Soquel.
Suckling colts	A. Jackson	Santa Cruz.
ROADSTERS.		
Bonnie	Oscar L. Gordon	Santa Cruz.
SADDLE HORSES.		
Hunter	Oscar L. Gordon	Santa Cruz.
CLASS II—CATTLE—DURHAM BULLS.		
Three years old or over	G. P. Laird	Santa Cruz.
COWS.		
Heifer, two years old	G. P. Laird	Santa Cruz.
Heifer, one year old	G. P. Laird	Santa Cruz.
Grade	A. Noble	Soquel.
JERSEYS.		
Black Prince (4768), bull over three years.	Oscar L. Gordon	Santa Cruz.
Nora Wright (7179), cow over three years.	Oscar L. Gordon	Santa Cruz.
Baby Saxe (10299), over one year.	Oscar L. Gordon	Santa Cruz.
Josie (10301), over one year.	Oscar L. Gordon	Santa Cruz.
NOT RECORDED.		
Daisy, three years old or over	Oscar L. Gordon	Santa Cruz.
One cow	Bert Chase	Santa Cruz.
One cow	F. A. Hihn	Santa Cruz.
Three cows	D. M. Lock	Scott Valley.
—	D. M. Lock	Scott Valley.
—	D. H. Lock	Scott Valley.
Three cows	W. H. Talbot	Felton.
—	W. H. Talbot	Felton.
—	W. H. Talbot	Felton.
CLASS III—SHEEP.		
Southdown rams	Martin Kinsley	Santa Cruz.
Ewes	Martin Kinsley	Santa Cruz.
Cotswold rams	U. W. Thompson	Soquel.
Ewes	U. W. Thompson	Soquel.
Five lambs, graded Cotswold	U. W. Thompson	Soquel.

FIRST DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
SWINE—ESSEX—BOARS.		
—, under one year	Martin Kinsley	Santa Cruz.
SOWS.		
—, over one year	Martin Kinsley	Santa Cruz.
—, under one year	Martin Kinsley	Santa Cruz.
Grade pigs	E. Kilfoil	Santa Cruz.
POULTRY.		
White Leghorns	A. Fridley	Santa Cruz.
Brown Leghorns	A. Fridley	Santa Cruz.
Breeding pen	A. Fridley	Santa Cruz.
Polands	Mrs. W. Currier	Santa Cruz.
Houdans	Mrs. Forbes	Santa Cruz.
Houdans	Martin Kinsley	Santa Cruz.
Game Bantams	Oscar E. Gordon	Santa Cruz.
Game Bantams	Mrs. W. Currier	Santa Cruz.
Black Bantams	Harry Towne	Santa Cruz.
Geese, Toulouse	Martin Kinsley	Santa Cruz.
Ducks, Rouen	Mrs. Forbes	Santa Cruz.
Ducks, Rouen	Mrs. W. Currier	Santa Cruz.
Silver-Spangled Hamburgs	Martin Kinsley	Santa Cruz.

PREMIUMS AWARDED—1888.

FIRST DEPARTMENT.

Name of Animal.	Exhibitor.	Address.	Award.
CLASS I—STALLIONS—FULL BLOOD.			
Solide	Martin Kinsley	Santa Cruz	\$10 00
Mederic	Martin Kinsley	Santa Cruz	\$5 00
DRAFT HORSES.			
One pair	Martin Kinsley	Santa Cruz	\$4 00
One pair	F. A. Hihn	Santa Cruz	\$8 00
HORSES OF ALL WORK.			
Stallion	F. A. Hihn	Santa Cruz	\$8 00
Colt, two years old	F. A. Hihn	Santa Cruz	\$4 00
Suckling colt	A. Jackson	Santa Cruz	\$2 00
Suckling colt	F. A. Hihn	Santa Cruz	\$3 00
Colt	Bert Chace	Santa Cruz	\$2 00
Suckling colt	I. Gray	Santa Cruz	\$2 00
BROOD MARES.			
Single entry	F. A. Hihn	Santa Cruz	\$8 00
Single entry	I. Gray	Soquel	\$4 00
ROADSTERS.			
Bonnie	Oscar L. Gordon	Santa Cruz	\$8 00
SADDLE HORSES.			
Hunter	Oscar L. Gordon	Santa Cruz	\$5 00
CARRIAGE HORSES.			
Single entry	A. Noble	Soquel	\$6 00
HORSES OF ALL WORK.			
Single entry	A. Noble	Soquel	\$8 00
CLASS II—CATTLE—DURHAM.			
Bull	G. P. Laird	Santa Cruz	\$8 00
Cow	G. P. Laird	Santa Cruz	\$6 00
Rosa, heifer	G. P. Laird	Santa Cruz	\$4 00
Rosalie, heifer	G. P. Laird	Santa Cruz	\$2 00
JERSEYS.			
Black Prince, bull (4768)	Oscar L. Gordon	Santa Cruz	\$8 00
Nora Wright, cow (7179)	Oscar L. Gordon	Santa Cruz	\$8 00
Baby Saxe, cow (10399)	Oscar L. Gordon	Santa Cruz	\$4 00
Josie, cow (10301)	Oscar L. Gordon	Santa Cruz	\$8 00
JERSEYS—NOT RECORDED.			
Cow	Bert Chace	Santa Cruz	\$4 00
Cow	F. A. Hihn	Santa Cruz	\$4 00
Cow	D. M. Lock	Santa Cruz	\$8 00
Cow, two years old	D. M. Lock	Santa Cruz	\$6 00
Cow	W. H. Talbot	Felton	\$8 00
GRADE—DURHAM.			
Cow	A. Noble	Soquel	\$8 00
CLASS III—SHEEP.			
Southdown ram	Martin Kinsley	Santa Cruz	\$4 00
Southdown ewe	Martin Kinsley	Santa Cruz	\$4 00
Five Southdown lambs	Martin Kinsley	Santa Cruz	\$4 00
Cotswold ram	U. W. Thompson	Soquel	\$4 00
Cotswold ewe	U. W. Thompson	Soquel	\$4 00
Five grade lambs	U. W. Thompson	Soquel	\$3 00

FIRST DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
SWINE.			
Essex sow, one year old or over	Martin Kinsley	Santa Cruz	\$3 00
Essex sow, one year old or over	Martin Kinsley	Santa Cruz	\$1 00
Essex sow, under one year	Martin Kinsley	Santa Cruz	\$2 00
Essex boar, under one year	Martin Kinsley	Santa Cruz	\$2 00
Graded Essex pigs	E. Kilfoil	Santa Cruz	\$3 00
POULTRY.			
Pair of White Leghorns	A. Fridley	Santa Cruz	\$1 00
Pair of Brown Leghorns	A. Fridley	Santa Cruz	\$2 00
Pair of Golden Polands	Mrs. W. Currier	Santa Cruz	\$1 00
Pair of Houdans	Mrs. W. Currier	Santa Cruz	\$2 00
Pair of Houdans	Martin Kinsley	Santa Cruz	\$1 00
Pair of Game Bantams	Oscar E. Gordon	Santa Cruz	\$1 00
Pair of Black Bantams	Harry Towne	Santa Cruz	\$2 00
Pair of Toulouse geese	Martin Kinsley	Santa Cruz	\$1 00
Pair of ducks	Mrs. W. Currier	Santa Cruz	\$1 00
Pair of Rouen ducks	Mrs. Forbes	Santa Cruz	\$1 00
Pair of Rouen ducks	Mrs. Forbes	Santa Cruz	\$2 00
Silver-Spangled Hamburgs	Martin Kinsley	Santa Cruz	\$1 00
Best and largest collection of thoroughbred poultry	A. Fridley	Santa Cruz	\$5 00
Best breeding pen of pure breed	A. Fridley	Santa Cruz	\$2 50
Pair of Brown Leghorns	A. Fridley	Santa Cruz	\$1 00
Second best thoroughbred poultry	Mrs. W. Currier	Santa Cruz	\$2 50

SECOND DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I—AGRICULTURE.			
Best sack of wheat	J. S. Matteson	Santa Cruz	\$5 00
Second best sack of wheat	Martin Kinsley	Santa Cruz	\$3 00
Best sack of oats	J. S. Matteson	Santa Cruz	\$4 00
Second best sack of oats	Martin Kinsley	Santa Cruz	\$2 00
Best sack of corn	L. K. Baldwin	Santa Cruz	\$4 00
Second best sack of corn	A. Noble	Soquel	\$2 00
Sack of potatoes	G. P. Laird	Santa Cruz	\$1 00
Best squash	A. Noble	Soquel	\$2 00
Second best squash	J. S. Young	Santa Cruz	\$1 00
Best pumpkins	J. S. Young	Santa Cruz	\$2 00
Second best pumpkins	A. Noble	Soquel	\$1 00
Beans	J. S. Young	Santa Cruz	\$1 00
Feed beets	G. P. Laird	Santa Cruz	\$1 00
Cucumbers	L. K. Baldwin	Santa Cruz	\$1 00
Carrots	G. P. Laird	Santa Cruz	\$1 00
Celery	F. A. Hihn	Santa Cruz	\$1 00
Table beets	U. W. Thompson	Soquel	\$1 00
CLASS II—DAIRY PRODUCTS.			
Best box of butter	F. D. Baldwin	Santa Cruz	\$6 00
Second best box of butter	G. M. Shippy	Scotts Valley	\$3 00
Best cheese	G. P. Laird	Santa Cruz	\$6 00
Second best cheese	P. Scaroni	Santa Cruz	\$3 00

THIRD DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I—HORTICULTURE.			
Largest and best collection of fruit.....	Daken & Son.....	Soquel.....	\$10 00
Second best collection of fruit.....	Miller & Son.....	Wrights.....	\$8 00
Best ten varieties of apples.....	J. S. Young.....	Santa Cruz.....	\$8 00
Second best ten varieties of apples.....	P. T. Stribling.....	Santa Cruz.....	\$4 00
Best five varieties of apples.....	J. S. Gilbert.....	Santa Cruz.....	\$4 00
Second best five varieties of apples.....	W. D. Storey.....	Santa Cruz.....	\$2 00
Best three varieties of apples.....	John Eaton.....	Scotts Valley.....	\$2 00
Second best three varieties of apples.....	W. H. Aiken.....	Wrights.....	\$1 00
Best single variety of apples.....	Rose Bros.....	Ben Lomond.....	\$1 00
Second best single variety of apples.....	A. Noble.....	Soquel.....	\$2 00
Best five varieties of pears.....	Harvey Comstock.....	Ben Lomond.....	\$4 00
Second best five varieties of pears.....	Thos. Slaughter.....	Ben Lomond.....	\$2 00
Best three varieties of pears.....	L. K. Baldwin.....	Santa Cruz.....	\$3 00
Second best three varieties of pears.....	W. H. Aiken.....	Wrights.....	\$1 00
Best single variety of pears.....	J. H. Dennett.....	Santa Cruz.....	\$2 00
Second best single variety of pears.....	Mrs. C. McKenzie.....	Ben Lomond.....	\$1 00
Best two varieties of plums.....	Daken & Son.....	Soquel.....	\$3 00
Best single variety of plums.....	Otto Mevis.....	Ben Lomond.....	\$2 00
Second best single variety of plums.....	W. H. Aiken.....	Wrights.....	\$1 00
Best three varieties of peaches.....	Harvey Comstock.....	Ben Lomond.....	\$3 00
Best single variety of peaches.....	Thos. Slaughter.....	Ben Lomond.....	\$2 00
Second best single variety of peaches.....	A. J. Keats.....	Santa Cruz.....	\$1 00
Best exhibit of figs.....	Harvey Comstock.....	Ben Lomond.....	\$2 00
Second best exhibit of figs.....	Daken & Son.....	Soquel.....	\$1 00
Best exhibit of almonds.....	Daken & Son.....	Soquel.....	\$3 00
Best exhibit of walnuts.....	Mrs. C. McKenzie.....	Ben Lomond.....	\$3 00
Second best exhibit of walnuts.....	Daken & Son.....	Soquel.....	\$1 00

FOURTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I—VITICULTURE.			
Best general display of grapes.....	Miller & Son.....	Wrights.....	\$10 00
Second best general display of grapes.....	J. W. Jarvis.....	Santa Cruz.....	\$5 00
Best display of wine grapes.....	Mrs. C. McKenzie.....	Ben Lomond.....	\$4 00
Second best display of wine grapes.....	J. W. Jarvis.....	Santa Cruz.....	\$2 00
Best display of table grapes.....	W. H. Aiken.....	Wrights.....	\$4 00
Second best display of table grapes.....	Doyle & Harmon.....	Soquel.....	\$2 00
Display of table grapes.....	W. H. Aiken.....	Wrights.....	\$3 00
Display of table grapes.....	Daken & Son.....	Soquel.....	\$1 00
CLASS II—WINES AND CIDER.			
Largest and best variety of wines.....	George Brahm.....	Santa Cruz.....	\$15 00
Second largest and best variety of wines.....	S. C. Mt. Wine Co.....	Santa Cruz.....	\$10 00
Best dry white wines.....	George Brahm.....	Santa Cruz.....	\$10 00
Best wine, according to age.....	S. C. Mt. Wine Co.....	Santa Cruz.....	\$10 00
Second best white wine.....	S. C. Mt. Wine Co.....	Santa Cruz.....	\$5 00
Second best wine, according to age.....	W. H. Aiken.....	Wrights.....	\$5 00
Best dry red wine.....	S. C. Mt. Wine Co.....	Santa Cruz.....	\$10 00
Best cider, one year old.....	W. H. Aiken.....	Wrights.....	\$3 00
Best cider vinegar.....	Daken & Son.....	Soquel.....	\$3 00
Second best cider vinegar.....	U. W. Thompson.....	Soquel.....	\$1 00

FIFTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I—PRESERVES.			
Best exhibit of three varieties of canned fruit.....	Rose Bros.....	Ben Lomond.....	\$10 00
Second best three varieties of canned fruit.....	S. B. Wallace.....	Santa Cruz.....	\$5 00
Best single variety of canned fruit.....	R. McCaskell.....	Santa Cruz.....	\$5 00
Second best variety of canned fruit.....	Thomas Slaughter.....	Ben Lomond.....	\$3 00
Best exhibit of jelly.....	Mrs. C. McKenzie.....	Ben Lomond.....	\$2 00
Second best exhibit of jelly.....	P. F. Stribling.....	Santa Cruz.....	\$1 00
Best jam.....	P. F. Stribling.....	Santa Cruz.....	\$2 00
Second best jam.....	Mrs. C. McKenzie.....	Ben Lomond.....	\$1 00
CLASS II—SUN-DRIED FRUIT.			
Best general display of sun-dried fruit.....	Miller & Son.....	Wrights.....	\$10 00
Second best display of sun-dried fruit.....	Thomas Slaughter.....	Ben Lomond.....	\$5 00
Best display of sun-dried prunes.....	W. H. Aiken.....	Wrights.....	\$5 00
Second best display of sun-dried prunes.....	Mrs. R. R. Jones.....	Santa Cruz.....	\$3 00
Best display of sun-dried apricots.....	Miller & Son.....	Wrights.....	\$2 00
Second best display of sun-dried apricots.....	Otto Mevis.....	Santa Cruz.....	\$1 00
Best display of sun-dried peaches.....	Miller & Son.....	Wrights.....	\$2 00
Second best display of sun-dried peaches.....	J. S. Gilbert.....	Santa Cruz.....	\$1 00
CLASS III—EVAPORATED FRUIT.			
Best general display of evaporated fruit.....	Daken & Son.....	Soquel.....	\$10 00
Second best display of evaporated fruit.....	Doyle & Harmon.....	Soquel.....	\$5 00
Best exhibit of evaporated prunes.....	Doyle & Harmon.....	Soquel.....	\$5 00
Second best exhibit of evaporated prunes.....	Daken & Son.....	Soquel.....	\$3 00
Best exhibit of evaporated pears.....	E. B. Buckman.....	Santa Cruz.....	\$2 00
Second best exhibit of evaporated pears.....	Daken & Son.....	Soquel.....	\$1 00
Best exhibit of evaporated apples.....	Daken & Son.....	Soquel.....	\$2 00
Second best exhibit of evaporated apples.....	E. B. Buckman.....	Santa Cruz.....	\$1 00
Best exhibit of evaporated peaches.....	Daken & Son.....	Soquel.....	\$2 00
Second best exhibit of evaporated peaches.....	E. B. Buckman.....	Santa Cruz.....	\$1 00
Raisins from muscat grapes.....	Doyle & Harmon.....	Soquel.....	\$2 00
Third best display of evaporated fruit.....	E. B. Buckman.....	Santa Cruz.....	\$3 00
HONEY.			
White honey.....	Miss Eva Church.....	Aptos.....	\$1 50
BREAD.			
One loaf of bread.....	Miss Eva Church, eleven years old.....	Aptos.....	\$1 50

SIXTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I—PAINTINGS.			
Best landscape in oil.....	Frank Heath.....	Santa Cruz.....	\$5 00
Best sketch from nature.....	Frank Heath.....	Santa Cruz.....	\$4 00
Best plaque painting.....	Mrs. L. A. Lindsey.....	Santa Cruz.....	\$2 50
Best specimen of crayon.....	Miss Aggie Hihn.....	Santa Cruz.....	\$2 00
Best display of porcelain painting.....	Mrs. W. T. Cope.....	Santa Cruz.....	\$2 50
Best single piece of porcelain painting.....	Mrs. W. F. Cope.....	Santa Cruz.....	\$2 50
Best painting on silk.....	Mrs. W. T. Cope.....	Santa Cruz.....	\$2 50
CLASS II—PENMANSHIP AND BOOKKEEPING.			
Display by students.....	Chestnutwood's Business College.....	Santa Cruz.....	Diploma.
CLASS III—EMBROIDERY, NEEDLEWORK, AND SEWING.			
Best point lace.....	Mrs. S. E. Green.....	Santa Cruz.....	\$2 00
Best crazy silk patchwork.....	Mrs. A. G. Rose.....	Santa Cruz.....	\$2 00
Best crochet spread.....	Mrs. W. T. Cope.....	Santa Cruz.....	\$2 00
Best pillow shams.....	Mrs. Piedmont.....	Santa Cruz.....	\$2 00

SIXTH DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Best rug	Mrs. L. K. Baldwin	Santa Cruz	\$2 00
Pair of stockings	Mrs. R. McCaskill.	Santa Cruz	\$2 00
Knit quilt	Mrs. Meader	Santa Cruz	\$2 00
Silk quilt	Mrs. Meader	Santa Cruz	\$2 00
Table spread	Mrs. E. T. Jewett.	Santa Cruz	\$2 00
Table scarf	Mrs. W. T. Cope.	Santa Cruz	\$2 00
Hall banner	Mrs. S. A. Lindsey.	Santa Cruz	\$2 00
Table scarf	Miss Katie Becker.	Santa Cruz	\$2 00
Satin banner	Mrs. S. E. Green.	Santa Cruz	\$2 00
Painted banner	Mrs. W. T. Cope.	Santa Cruz	\$2 00
Hair work	Mrs. M. E. Cannon.	Santa Cruz	\$2 00
Wall bracket	Mrs. R. McCaskill.	Santa Cruz	\$2 00
Case of fancy work	Mrs. Forbes	Santa Cruz	\$5 00
Tray cloth	Mrs. Forbes	Santa Cruz	\$2 00
Splasher	Mrs. Pope	Santa Cruz	\$2 00
Moss work	Miss May Kenville	Santa Cruz	\$2 00
Hand-made dress	Mrs. Edgecomb ..	Santa Cruz	\$2 00
CLASS IV—FLOWERS AND PLANTS.			
Bouquet of flowers	Miss Sophia Grant	Santa Cruz	\$5 00
Bouquet of flowers	Miss Carrie Miller.	Santa Cruz	\$3 00
Best display of flowers	Mrs. A. Noble	Soquel	\$4 00
Second best display of flowers	P. Thrift	Santa Cruz	\$2 00
Best display of plants	P. Thrift	Santa Cruz	\$3 00
NATURAL HISTORY.			
Stuffed birds and animals	Otto Mevis	Santa Cruz .....	.....

TRANSACTIONS

OF THE

SIXTEENTH DISTRICT AGRICULTURAL ASSOCIATION

For the Year 1888,

Composed of the County of San Luis Obispo.

OFFICERS OF THE ASSOCIATION.

E. W. STEELE.....	President.
J. H. BARRETT	Secretary.
R. E. JACK	Treasurer.

DIRECTORS.

L. M. WARDEN	San Luis Obispo.
E. W. STEELE	Edna.
J. H. HOLLISTER	San Luis Obispo.
J. V. WEBSTER.....	Creston.
GEORGE VAN GORDEN	San Simeon.
J. H. ORCUTT	San Luis Obispo.
P. W. MURPHY	Santa Margarita.
E. LEEDHAM	Arroyo Grande.

REPORT.

SAN LUIS OBISPO, March 15, 1889.

To the honorable the State Board of Agriculture :

GENTLEMEN: The Directors of the Sixteenth District Agricultural Association submit this, their report of the transactions of said association, for the year ending this date.

J. H. BARRETT, Secretary.

RECEIPTS AND EXPENDITURES.

Receipts.

Balance on hand last report.....	\$589 04
Sale of privileges.....	1,150 00
Entries for races.....	1,185 00
Receipts from pavilion.....	803 25
Receipts from park.....	2,248 25
State warrant.....	807 50
	<u>\$6,783 04</u>

Expenditures.

Purses and premiums paid.....	\$3,732 85
Money returned to poor woman who purchased privilege at pavilion.....	50 00
Watchman at pavilion.....	144 00
Music.....	325 00
Keeping racetrack in good order (contract).....	150 00
Blacksmith's bill.....	78 00
Plumbing for pavilion.....	95 90
Hardware bill for pavilion.....	78 15
Hay and straw purchased.....	143 25
Advertising and printing.....	342 87
Labor and expenses.....	539 33
Investments—chairs, scales, etc.....	294 83
Rent paid the San Luis Obispo Park Association.....	520 00
Balance cash on hand.....	288 86
	<u>\$6,783 04</u>

EXHIBITS AT THE FAIR—1888.

LIVE STOCK DEPARTMENT.

Name of Animal.	Owner.	Address.
CLASS I—LIVE STOCK.		
Enterprise, stallion	E. Price	Arroyo Grande.
Hit or Miss, mare	E. Price	Arroyo Grande.
Paloma, mare	G. Van Gorden	San Simeon.
Lady Tiffany, mare	Brown & Taylor	San Luis Obispo.
Miss Monroe, mare	Brown & Taylor	San Luis Obispo.
Monroe S, stallion	Brown & Taylor	San Luis Obispo.
Anteal, colt	Brown & Taylor	San Luis Obispo.
Flora D, mare	Brown & Taylor	San Luis Obispo.
Duke McLellan, stallion	Brown & Taylor	San Luis Obispo.
Bayard, Jr., stallion	Thomas Kelly	San Luis Obispo.
Yearling stallion	H. G. Petty	San Luis Obispo.
Bezeque and Keppler, carriage team	H. A. Vachell	Creston.
Nig and Clyde, carriage team	H. M. Warden	San Luis Obispo.
Charley, carriage horse	John Scott	Paso Robles.
Charley and Billy, team roadsters	H. M. Warden	San Luis Obispo.
Hillside, saddle horse	J. W. Warden	San Luis Obispo.
Mrs. Stanley, mare	E. W. Steele	San Luis Obispo.
John Morgan, Jr., draft stallion	J. H. Thompson	Edna.
Gen. Tom Thumb, draft stallion	J. H. Thompson	Edna.
J. G. Richmond, stallion, all purposes	C. A. Rice	Arroyo Grande.
Cognac, draft stallion	C. A. Rice	Arroyo Grande.
Young America, stallion, all purposes	R. M. Shackleford	Paso Robles.
Susie, mare, all purposes	R. M. Shackleford	Paso Robles.
O'Donohue, stallion, all purposes	H. I. Jasperson	San Luis Obispo.
Alexandria, mare, all purposes	A. Tognazzini	Cayucos.
Helvetia, mare, all purposes	A. Tognazzini	Cayucos.
Nellie T, mare, roadster	A. Tognazzini	Cayucos.
Duke, Jr., stallion, roadster	N. H. Fitzwater	San Luis Obispo.
Suckling colt	E. W. Steele	Edna.
Suckling colt	E. W. Steele	Edna.
Suckling colt	E. W. Steele	Edna.
Kittie Kimo, mare, draft	E. W. Steele	Edna.
Sallie, mare, draft	E. W. Steele	Edna.
Mollie, mare, draft	E. W. Steele	Edna.
Kate, mare, draft	James Clausen	San Luis Obispo.
Suckling colt	James Clausen	San Luis Obispo.
Altoona, standard stallion	George Steele	Edna.
Maud, mare, roadster	George Steele	Edna.
Altoona, stallion and family	George Steele	Edna.
Golddust, mare, roadster	J. H. Orcutt	San Luis Obispo.
Calif Chief, stallion, draft	Dwight Reynolds	Paso Robles.
Stella and Edna, team roadster colts	C. R. Callender	San Luis Obispo.
Dode, colt, all purposes	C. R. Callender	San Luis Obispo.
Roy, colt, all purposes	C. R. Callender	San Luis Obispo.
Carrie and Percy C, colt roadsters	C. R. Callender	San Luis Obispo.
Stallion, two years old	C. R. Callender	San Luis Obispo.
Jennie T, colt, all purposes	A. Tognazzini	Cayucos.
Daisy M, roadster mare	S. E. Morse	Arroyo Grande.
Clearmont, stallion trotter	George Van Gorden	San Simeon.
Ginger, roadster colt	George Van Gorden	San Simeon.
Dante, stallion and family	C. R. Callender	San Luis Obispo.
Stallion	M. Elberg	San Luis Obispo.
Altoona, Jr., stallion	Robert Elliott	San Luis Obispo.
Mare, roadster	Robert Elliott	San Luis Obispo.
Suckling colt, roadster	Robert Elliott	San Luis Obispo.
Brutus, draft stallion	George M. Frink	San Luis Obispo.

LIVE STOCK DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
Lady Thorn and Pocahontas, carriage team	J. G. Pennington	San Luis Obispo.
Yearling mare	J. H. Jaspersen	San Luis Obispo.
Suckling colt	E. Price	Arroyo Grande.
Suckling colt	E. Price	Arroyo Grande.
Mare, roadster	Peter Edgar	San Luis Obispo.
Suckling colt	Peter Edgar	San Luis Obispo.
Yearling stallion	R. Bushnell	San Luis Obispo.
Crown Prince, draft stallion	E. W. Steele	Edna.
CLASS II—CATTLE.		
Omaha, Holstein bull	E. W. Steele	Edna.
Belle of Pacific, Holstein cow	E. W. Steele	Edna.
Artis Carrissa, Holstein cow	E. W. Steele	Edna.
Queen of Pacific, Holstein cow	E. W. Steele	Edna.
Wissakicow, Holstein cow	E. W. Steele	Edna.
Four Holstein calves	E. W. Steele	Edna.
Jersey cow	E. W. Steele	Edna.
POULTRY.		
Wyandotte fowls	Joseph Welsh	San Luis Obispo.

THE PUBLIC SCHOOLS.

In this department were exhibited samples of map drawing, industrial drawing, penmanship, entomological and geological collections, as well as a great variety of papers, showing the actual work of the pupils of the public schools of the county, constituting altogether one of the most pleasing and interesting features of the exhibit. Although the terms of the schools had but fairly begun, nearly every district in the county made a highly creditable showing, while, in some instances, the work was such as to reflect great credit upon the efficiency of the public schools. As a means of economizing the work of public education, of aiding in developing the resources of the county and inducing immigration, the society should extend every facility to school officers and teachers toward making this a permanent feature of the annual fair. To this end school exhibits should be made a separate class, and a liberal premium offered for the best general exhibit.

J. H. BARRETT, Secretary.

PREMIUMS AWARDED—1888.

LIVE STOCK DEPARTMENT.

Name of Animal.	Exhibitor.	Address.	Award.
CLASS I—HORSES.			
Best stallion, thoroughbred	E. Price	San Luis Obispo.	\$10 00
Best mare, three years old, thoroughbred.	Geo. Van Gorden..	San Simeon	\$10 00
Second best mare, three years old, thoroughbred	E. Price	San Luis Obispo.	\$5 00
CLASS II—STANDARD BRED HORSES.			
Best stallion	W. H. Taylor	San Luis Obispo.	\$7 50
Second best stallion	Geo. Steele	San Luis Obispo.	\$5 00
Best mare, three years old or over.	E. W. Steele.	San Luis Obispo.	\$7 50
Second best mare, three years old or over.	Brown & Taylor ..	San Luis Obispo.	\$4 00
CLASS III—ROADSTERS.			
Best stallion, two years old	Brown & Taylor ..	San Luis Obispo.	\$2 50
Second best stallion, two years old	Geo. Van Gorden ..	San Simeon	\$1 50
Best stallion, one year old	Brown & Taylor ..	San Luis Obispo.	\$2 00
Second best stallion, one year old	H. C. Petty	San Luis Obispo.	\$1 00
Best mare, four years old	A. Tognazzini.	Cayucos	\$5 00
Second best mare, four years old	J. H. Orcutt.	San Luis Obispo.	\$2 50
Best mare, three years old	C. R. Callender ..	San Luis Obispo.	\$3 00
Best mare, two years old	A. Tognazzini.	Cayucos	\$2 50
Best yearling filly	C. R. Callender ..	San Luis Obispo.	\$2 50
Second best yearling filly	C. R. Callender ..	San Luis Obispo.	\$1 50
Best suckling colt	P. Edgar	San Luis Obispo.	\$2 00
Best span of matched roadsters	H. M. Warden	San Luis Obispo.	\$5 00
Second best span of matched roadsters.	J. G. Pennington..	San Luis Obispo.	\$3 00
Best single roadster	N. H. Fitzwater ..	San Luis Obispo.	\$2 50
Second best single roadster	R. S. Brown	San Luis Obispo.	\$1 50
Best stallion and family	Geo. Steele	San Luis Obispo.	\$7 50
CLASS IV—DRAFT HORSES.			
Best stallion, three years old or over ...	G. M. Frink	San Luis Obispo.	\$7 50 and diploma.
Second best stallion, three years old or over	P. Kelley	San Luis Obispo.	\$4 00
Best suckling colt	E. W. Steele.	San Luis Obispo.	\$1 00
Best mare, three years old or over	E. W. Steele.	San Luis Obispo.	\$5 00
Second best mare, three years old or over.	J. Clausen	San Luis Obispo.	\$2 50
Best stallion, two years old	C. A. Price	Arroyo Grande.	\$3 00
Best suckling filly	J. Clausen	San Luis Obispo.	\$1 00
CLASS V—CARRIAGE HORSES.			
Best carriage team	H. M. Warden	San Luis Obispo.	\$5 00
Second best carriage team	R. M. Shackelford.	Paso Robles.	\$2 50
Best single horse	John Scott	Paso Robles.	\$2 50
CLASS VI—HORSES FOR ALL PURPOSES.			
Best stallion, three years old or over ...	R. M. Shackelford.	Paso Robles.	\$7 50 and diploma.
Second best stallion, three years old or over	H. J. Jasperson	San Luis Obispo.	\$4 00
Best stallion, two years old	D. Reynolds.	San Luis Obispo.	\$3 00
Best mare, three years old or over	A. Tognazzini.	Cayucos	\$5 00
Best mare, one year old	H. J. Jasperson	San Luis Obispo.	\$2 50
Best stallion and family	C. R. Callender	San Luis Obispo.	\$7 50 and diploma.
CLASS VII—SADDLE HORSES.			
Best saddle horse	J. W. Warden	San Luis Obispo.	\$4 00

LIVE STOCK DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
CATTLE.			
Best Jersey cow	E. W. Steele	Edna	\$5 00
Best Holstein bull, two years old	E. W. Steele	Edna	\$5 00
Best Holstein cow	E. W. Steele	Edna	\$5 00
Second best Holstein cow	E. W. Steele	Edna	\$3 00
Best Holstein herd	E. W. Steele	Edna	\$5 00
POULTRY.			
Best Wyandottes	Joseph Welsh	San Luis Obispo	\$2 00

MISCELLANEOUS DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
Chinese paper	W. A. Henderson	San Luis Obispo .....	.....
Ulster Gazette	W. A. Henderson	San Luis Obispo .....	.....
Relics	W. A. Henderson	San Luis Obispo	Sp. men.
Relics	Mrs. E. Watkins	San Luis Obispo	Sp. men.
Shells	Mrs. J. M. Vincent	San Luis Obispo	\$5 00
Shells	Mrs. L. H. Bickford	San Luis Obispo .....	.....
Three pieces of worsted	Mrs. L. A. Brown	San Luis Obispo .....	.....
Wool	E. Watkins	San Luis Obispo .....	.....
Guinea eggs	Mrs. E. Hampton	San Luis Obispo	Sp. men.
One egg	Mrs. C. Maxwell	San Miguel	Sp. men.
Collection of eggs	A. Venable & A. Hayes	San Luis Obispo	Sp. men.
Tobacco	Mr. Angus	Creston	\$2 00
Lemons	Suey Ranch	Santa Maria	\$5 00
Best exhibit of peaches	A. M. Hardie	Cayucos	\$5 00
Best exhibit of prunes	E. A. Atwood	San Luis Obispo	\$5 00
Cabbage	E. Leedham	Arroyo Grande	\$4 00
Fifty pounds of wheat	G. S. Brown	Starkey	\$4 00
Fifty pounds of barley	S. C. Davis	Moro	\$4 00
Oats (wild)	J. V. Webster	Creston	\$4 00
Yellow corn in the ear	J. V. Webster	Creston .....	.....
Yellow corn in the ear	J. P. Andrews	San Luis Obispo .....	.....
Yellow corn in the ear	Mr. Beedan	Miles Station .....	.....
Yellow corn in the ear	W. W. Broughton	Lompoc .....	.....
Yellow corn in the ear	E. A. Atwood	San Luis Obispo	\$4 00
White corn in the ear	W. W. Broughton	Lompoc .....	.....
White corn in the ear	Capt. O. Root	Miles Station .....	.....
White corn in the ear	J. P. Andrews	San Luis Obispo	\$4 00
Sweet corn in the ear	J. Hansen	San Luis Obispo	\$4 00
Sweet corn in the ear	J. V. N. Young	Arroyo Grande .....	.....
Squash	J. S. Rice	Arroyo Grande .....	.....
Squash (largest)	Capt. O. Root	Miles Station	\$5 00
Squash	J. V. Webster	Creston .....	.....
Squash (best exhibit of garden produce)	J. V. N. Young	Arroyo Grande	\$10 00
Squash	Mr. Beedan	Miles Station .....	.....
Squash	J. Hansen	San Luis Obispo .....	.....
Squash, cooking	J. P. Andrews	San Luis Obispo .....	.....
Squash, cooking	J. V. Webster	Creston .....	.....
Squash, cooking	J. V. N. Young	Arroyo Grande	\$4 00
Watermelon	John Wilkinson	Huasna	\$2 00
Watermelon	A. T. Souza	San Luis Obispo .....	.....
Watermelon	A. F. Garcia	San Luis Obispo .....	.....
Watermelon	J. V. Webster	Creston .....	.....
Watermelon	John Wilkinson	Huasna	\$2 00
Onions, fifty pounds or over	J. Hansen	San Luis Obispo .....	.....
Onions	J. V. N. Young	Arroyo Grande	\$4 00
Onions	R. Byers	Arroyo Grande .....	.....
Onions	W. W. Broughton	Lompoc .....	.....
Cabbage	J. S. Rice	Arroyo Grande .....	.....
Cabbage	A. T. Souza	San Luis Obispo .....	.....
Cabbage	J. Hansen	San Luis Obispo .....	.....

MISCELLANEOUS DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Cabbage	J. V. N. Young	Arroyo Grande	
Beets	J. S. Rice	Arroyo Grande	
Beets	Thomas Welsh	San Luis Obispo	
Beets	J. Hansen	San Luis Obispo	
Beets	J. V. N. Young	Arroyo Grande	\$4 00
Carrots	Thomas Welsh	San Luis Obispo	
Carrots	J. V. N. Young	Arroyo Grande	\$4 00
Tomatoes	J. S. Rice	Arroyo Grande	
Tomatoes	J. Hansen	San Luis Obispo	\$4 00
Tomatoes	J. M. Huych	San Luis Obispo	
Tomatoes	J. V. N. Young	Arroyo Grande	
Tomatoes	Wm. Sandercock	San Luis Obispo	
Red peppers	J. S. Rice	Arroyo Grande	
Peppers	J. Hansen	San Luis Obispo	\$4 00
Peppers	J. V. N. Young	Arroyo Grande	
Beans	J. Hansen	San Luis Obispo	
Beans	J. V. N. Young	Arroyo Grande	\$4 00
Beans	Mr. Beedan	Miles Station	
Beans	J. P. Andrew	San Luis Obispo	
Tobacco	Mr. Angus	Creston	
Potatoes, fifty pounds or over	J. V. N. Young	Arroyo Grande	
Potatoes	G. Devoto	San Luis Obispo	\$4 00
Potatoes, sweet	J. V. N. Young	Arroyo Grande	\$4 00
Millet, evergreen	J. V. Webster	Creston	\$4 00
Artichokes	J. V. Webster	Creston	\$2 00
Barley	A. T. Souza	San Luis Obispo	
Single onion	A. T. Souza	San Luis Obispo	\$1 00
Green peas	A. T. Souza	San Luis Obispo	\$2 00
Pepper plants	J. S. Rice	Arroyo Grande	\$1 00
Kaffir corn	J. V. Webster	Creston	\$2 00
Radishes	Mrs. J. M. Vincent	San Luis Obispo	\$2 00
Parsnips	J. Hansen	San Luis Obispo	\$2 00
Parsnips	J. V. N. Young	Arroyo Grande	
Turnips	J. Hansen	San Luis Obispo	\$2 00
Butter, fifty pounds or over	E. W. Steele	Edna	
Butter	Peter Tognazzini	Cayucos	\$10 00
Cheese	E. Watkins	San Luis Obispo	
Cheese	Frank Pierce	Pizino	\$10 00
Honey (comb)	Mrs. L. H. Bickford	San Luis Obispo	\$2 00
Single roll of butter	A. F. Garcia	Pozo	\$5 00
Bread (home made)	Mrs. D. Losoe		\$5 00
Riesling wine	Goldtree Bros.	San Luis Obispo	\$2 50
Wines (Mission)	Goldtree Bros.	San Luis Obispo	\$2 50
Red wine in bottles	M. J. Lopaz	San Luis Obispo	
Red wine in bottles (Zinfandel)	Goldtree Bros.	San Luis Obispo	\$4 00
White wine	Goldtree Bros.	San Luis Obispo	\$4 00
Red wine	Dr. W. W. Hays	San Luis Obispo	\$4 00
White wine	Dr. W. W. Hays	San Luis Obispo	\$4 00
Pampas plumes	Mrs. H. M. Warden	San Luis Obispo	\$2 00
Pampas plumes	Mrs. F. Adams	San Luis Obispo	
Various kinds of seeds	J. V. Webster	Creston	\$4 00
Various kinds of seeds	A. N. Rude	Estrella	
Various kinds of seeds	A. C. Gibson	Los Asos	
Cocoons	Wm. Evans	San Luis Obispo	\$2 00
Cucumbers	J. S. Rice	Arroyo Grande	
Cucumbers	J. Hansen	San Luis Obispo	\$2 00
Cucumbers	J. V. N. Young	Arroyo Grande	
Cucumbers	Wm. Sandercock	San Luis Obispo	
Muskmelons	J. Hansen	San Luis Obispo	\$2 00
Muskmelons	Captain O. Root	Miles Station	
Almonds	Goldtree Bros.	San Luis Obispo	
Almonds	J. P. Andrews	San Luis Obispo	\$2 00
Almonds	Dr. Hathway	San Luis Obispo	
Hops	J. V. Webster	Creston	\$5 00
Sorghum	J. V. Webster	Creston	
Walnuts	J. P. Andrews	San Luis Obispo	\$2 00
Chestnuts	M. J. Lopaz	San Luis Obispo	\$2 50
Rhubarb	J. Hansen	San Luis Obispo	
Celery	J. Hansen	San Luis Obispo	

MISCELLANEOUS DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Pumpkins	J. V. N. Young	Arroyo Grande .....	.....
Sugarcane	J. V. Webster	Creston	\$2 00
Best double display	Hardie & Hazard .....	.....	.....\$10 00
Best single display	E. A. Atwood	San Luis Obispo	\$15 00
Best variety	E. Leedham	Arroyo Grande	\$5 00
Stone cutting	James Hughill	Nipomo	\$5 00

LADIES' DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
Sofa pillow	J. C. Stocking	Moro .....	.....
Sofa pillow	Mrs. G. B. Nichols	San Luis Obispo	\$2 00
Feather work	Sinsheimer Bros.	San Luis Obispo .....	.....
Handkerchief bag	Mrs. Beidenbach	San Luis Obispo .....	.....
Perfume bag	Mrs. Beidenbach	San Luis Obispo .....	.....
Shaving case	Mrs. Beidenbach	San Luis Obispo .....	.....
Handkerchief case	Mrs. Beidenbach	San Luis Obispo	\$1 00
Handkerchief case	Minnie Eagan	San Luis Obispo .....	.....
Lavender fagots	Naomi Canon	San Luis Obispo	\$1 00
Rugs	Kate Thatcher	Arroyo Grande	\$1 00
Portuguese handkerchief	J. B. Blake	San Luis Obispo .....	.....
Embroidery	Frances Flores	San Luis Obispo .....	.....
Silk scarf	Frances Flores	San Luis Obispo .....	.....
Silk dress	Frances Flores	San Luis Obispo .....	.....
Spanish work	Minnie Correa .....	.....	.....
Artificial flowers	(eight years)	San Luis Obispo	\$1 00
Artificial flowers	Mrs. E. Motz	San Luis Obispo .....	.....
Artificial flowers	Mrs. E. Motz	San Luis Obispo .....	.....
Artificial flowers	Mrs. E. Motz	San Luis Obispo .....	.....
Artificial flowers	Mrs. S. Hoefer	San Luis Obispo .....	.....
Artificial flowers	Mrs. S. Hoefer	San Luis Obispo .....	.....
Artificial flowers	Mrs. S. Hoefer	San Luis Obispo .....	.....
Artificial flowers	Mrs. L. M. Warden	San Luis Obispo	\$10 00
Artificial flowers	Mrs. S. Olinsky	San Luis Obispo .....	.....
Artificial flowers	Mrs. Mary Stark	San Luis Obispo .....	.....
Bead work	Mrs. S. Olinsky	San Luis Obispo	\$2 00
Bead work	Mrs. J. M. Vincent	San Luis Obispo .....	.....
Crazy quilt	Mrs. E. C. Isom	Moro .....	.....
Crazy quilt	Mrs. L. H. Bickford	San Luis Obispo	\$2 00
Crochet work	Mrs. N. D. Brown	San Luis Obispo .....	.....
Crochet work	Edith M. Barrett	San Luis Obispo .....	.....
Crochet work	Mrs. A. E. Barrett	San Luis Obispo .....	.....
Crochet work	Mrs. S. Olinsky	San Luis Obispo .....	.....
Crochet work	Mrs. S. Olinsky	San Luis Obispo .....	.....
Crochet work	Mrs. S. Olinsky	San Luis Obispo .....	.....
Crochet work	Mrs. S. Olinsky	San Luis Obispo	\$2 00
Crochet work	Mrs. S. Olinsky	San Luis Obispo .....	.....
Crochet work	Mrs. S. Olinsky	San Luis Obispo .....	.....
Crochet work	Mrs. S. Olinsky	San Luis Obispo .....	.....
Rag carpet, ten yards	Miss S. A. Palmer	San Luis Obispo	\$2 00
Embroidery	Mrs. L. M. Warden	San Luis Obispo .....	.....
Embroidery	Minnie Nelligan	Creston	\$5 00
Embroidery	E. L. Dickerson	San Luis Obispo .....	.....
Embroidery	E. L. Dickerson	San Luis Obispo .....	.....
Embroidery	E. L. Dickerson	San Luis Obispo .....	.....
Embroidery	E. L. Dickerson	San Luis Obispo .....	.....
Embroidery	E. L. Dickerson	San Luis Obispo .....	.....
Embroidery	E. L. Dickerson	San Luis Obispo .....	.....
Embroidery	Mrs. S. Olinsky	San Luis Obispo .....	.....
Embroidery	Mrs. S. Olinsky	San Luis Obispo .....	.....
Moss work	J. C. Stocking	Moro	\$2 00
Patchwork quilt	Mrs. M. Schneider	Arroyo Grande	\$2 00
Patchwork quilt	Mrs. M. Schneider	Arroyo Grande .....	.....
Patchwork quilt	Mrs. P. Moore	Oso Flaco .....	.....

LADIES' DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Patchwork quilt.....	E. L. Dickerson	San Luis Obispo.....	.....
Patchwork quilt.....	Mrs. Beidenbach	San Luis Obispo.....	.....
Patchwork quilt.....	Mrs. Beidenbach	San Luis Obispo.....	.....
Patchwork quilt.....	Mrs. Silva.....	San Luis Obispo.....	.....
Patchwork quilt.....	Mrs. J. H. Orcutt.....	San Luis Obispo.....	.....
Patchwork quilt.....	Mrs. Mary Word.....	San Luis Obispo.....	.....
Patchwork quilt.....	Mrs. Mary Word.....	San Luis Obispo.....	.....
Shell work.....	Mrs. J. C. Stocking.....	Moro.....	\$2 00
Slippers, worked.....	Mrs. A. M. Norton.....	San Luis Obispo.....	\$2 00
Thread lace.....	Miss A. Gans.....	Cambria.....	\$5 00
Thread lace.....	Mrs. J. M. Vincent.....	San Luis Obispo.....	.....
Thread lace.....	Mrs. Silva.....	San Luis Obispo.....	.....
Thread lace.....	Mrs. Silva.....	San Luis Obispo.....	.....
Thread lace.....	Miss Alice Leland.....	San Luis Obispo.....	.....
Knitting work.....	Susie Harris.....	Creston.....	\$2 00
Knitting work.....	Susie Harris.....	Creston.....	.....
Knitting work.....	Susie Harris.....	Creston.....	.....
Knitting work.....	Mrs. Franklin.....	Cambria.....	.....
Knitting work.....	Mrs. S. Olinsky.....	San Luis Obispo.....	.....
Tatting.....	Mrs. W. M. York.....	San Luis Obispo.....	\$2 00
Arrasene.....	May Wurch.....	San Luis Obispo.....	.....
Arrasene.....	Mollie Badger.....	San Luis Obispo.....	.....
Arrasene.....	Mollie Badger.....	San Luis Obispo.....	.....
Arrasene.....	E. L. Dickerson.....	San Luis Obispo.....	\$2 00
Arrasene.....	E. L. Dickerson.....	San Luis Obispo.....	.....
Arrasene.....	Mrs. S. Olinsky.....	San Luis Obispo.....	.....
Arrasene.....	Mrs. S. Olinsky.....	San Luis Obispo.....	.....
Arrasene.....	Mrs. S. Olinsky.....	San Luis Obispo.....	.....
Arrasene.....	Mrs. S. Olinsky.....	San Luis Obispo.....	.....
Tidies.....	Mrs. P. Moore.....	Oso Flaco.....	.....
Tidies.....	Mrs. P. Moore.....	Oso Flaco.....	.....
Tidies.....	Minnie Blake.....	San Luis Obispo.....	\$2 00
Tidies.....	Minnie Blake.....	San Luis Obispo.....	.....
Tidies.....	Mollie Badger.....	San Luis Obispo.....	.....
Tidies.....	Mrs. Franklin.....	Cambria.....	.....
Tidies.....	Mrs. S. Olinsky.....	San Luis Obispo.....	.....
Tidies.....	Mrs. Canon.....	San Luis Obispo.....	.....
Tidies.....	Mrs. D. Hayes.....	San Luis Obispo.....	.....
Tidies.....	Minnie Egan.....	San Luis Obispo.....	.....
Tidies.....	Lillian Spurgeon.....	San Luis Obispo.....	.....
Pincushion.....	Mrs. P. Moore.....	Oso Flaco.....	.....
Pincushion.....	Mrs. C. H. Reed.....	San Luis Obispo.....	\$2 00
Pincushion.....	Mrs. Beidenbach.....	San Luis Obispo.....	.....
Banner.....	Mrs. P. Moore.....	San Luis Obispo.....	.....
Banner.....	Miss C. B. Russell.....	San Luis Obispo.....	.....
Banner.....	E. L. Dickerson.....	San Luis Obispo.....	\$2 00
Banner.....	Mrs. S. Olinsky.....	San Luis Obispo.....	.....
Banner.....	E. L. Dickerson.....	San Luis Obispo.....	.....
Banner.....	E. L. Dickerson.....	San Luis Obispo.....	.....
Banner.....	G. C. Darke.....	San Luis Obispo.....	.....
Outline embroidery.....	Mrs. S. Hoefler.....	San Luis Obispo.....	\$2 00
Outline embroidery.....	Mrs. W. H. Warden.....	San Luis Obispo.....	.....
Outline embroidery.....	Mary Bishop.....	San Luis Obispo.....	.....
Macrame work.....	Mollie Badger.....	San Luis Obispo.....	\$2 00
Macrame work.....	Mollie Badger.....	San Luis Obispo.....	.....
Macrame work.....	Mary Curran.....	San Luis Obispo.....	.....
Charm string.....	Mrs. W. M. York.....	San Luis Obispo.....	\$1 00
Rose pillow.....	Mrs. J. H. Orcutt.....	San Luis Obispo.....	\$2 00
Coverlid.....	Mrs. Franklin.....	Cambria.....	\$2 00
Coverlid.....	Miss S. A. Palmer.....	San Luis Obispo.....	.....
Crazy table scarf.....	Mrs. L. M. Warden.....	San Luis Obispo.....	\$5 00
Crazy sofa pillow.....	Mrs. L. M. Warden.....	San Luis Obispo.....	\$5 00
Crazy sofa pillow.....	Mrs. Beidenbach.....	San Luis Obispo.....	.....
Table linen.....	Mrs. L. M. Warden.....	San Luis Obispo.....	.....
Table linen.....	E. L. Dickerson.....	San Luis Obispo.....	.....
Embroidery, eight pieces.....	Mrs. S. Olinsky.....	San Luis Obispo.....	.....
Handkerchief box.....	Mrs. S. Olinsky.....	San Luis Obispo.....	.....
Two collar boxes.....	Mrs. S. Olinsky.....	San Luis Obispo.....	.....
Netted work, two pieces.....	Mrs. S. Olinsky.....	San Luis Obispo.....	.....

LADIES' DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Needlework	Mrs. S. Olinsky	San Luis Obispo .....	.....
Needlework	Julia Hill	San Luis Obispo .....	.....
Canvas work	Mrs. S. Olinsky	San Luis Obispo .....	.....
Crochet work No. 2	Mrs. S. Olinsky	San Luis Obispo .....	.....
Crochet	Mrs. Beidenbach	San Luis Obispo .....	.....
Crochet	Mrs. A. Gans	Cambria .....	.....
Crochet	Mrs. J. M. Vincent	San Luis Obispo .....	.....
Crochet	Mrs. Venable	San Luis Obispo .....	.....
Two fancy trays and bird	Mrs. S. Olinsky	San Luis Obispo .....	.....
Honiton lace	Myrtie Huyck	San Luis Obispo	\$1 00
Pieces of lava	E. L. Dickerson	San Luis Obispo	\$1 00
Artificial fruit	E. L. Dickerson	San Luis Obispo .....	.....
Longest charm string	Susie Ward	San Luis Obispo	\$2 00
Embroidery	Minnie Egan	San Luis Obispo	\$1 00
Sofa pillow	Mrs. G. B. Nichols	San Luis Obispo	\$2 00
Drawings, architectural	H. S. Laird	San Luis Obispo	\$10 00
Penmanship	C. H. Lysing	Nipoma	\$10 00
Painting in oil	Lolo Ward	San Luis Obispo	\$10 00
Painting in oil	May Hathaway	San Luis Obispo .....	.....
Painting in oil, flowers	Mrs. H. E. McBride	San Luis Obispo	\$10 00
Painting in oil, flowers	Mrs. H. E. McBride	San Luis Obispo .....	.....
Painting in oil, flowers	Mrs. H. E. McBride	San Luis Obispo .....	.....
Painting in oil, flowers	Miss Blanche Canon	San Luis Obispo .....	.....
Painting in oil, flowers	Miss Alice Leland	San Luis Obispo .....	.....
Painting in oil, flowers	Mrs. R. Clansen	Pozo .....	.....
Painting in oil, flowers	Miss Littlefield	Oakland .....	.....
Painting in oil, flowers	H. D. Bond	San Francisco .....	.....
Painting in oil, flowers	Mrs. Delzelle	San Luis Obispo .....	.....
Painting in oil, flowers	Mrs. Delzelle	San Luis Obispo .....	.....
Painting in oil, flowers	Miss Katie Knapp	San Luis Obispo .....	.....
Painting in oil, animal	Mrs. H. E. McBride	San Luis Obispo	\$10 00
Painting in oil, animal	Mrs. H. E. McBride	San Luis Obispo .....	.....
Painting in oil, animal	Mrs. H. E. McBride	San Luis Obispo .....	.....
Painting in oil, animal	Mrs. H. E. McBride	San Luis Obispo .....	.....
Painting in oil, landscape	Mrs. H. E. McBride	San Luis Obispo .....	.....
Painting in oil, landscape	Mrs. H. E. McBride	San Luis Obispo .....	.....
Painting in oil, landscape	Miss Blanche Canon	San Luis Obispo	\$10 00
Painting in oil, landscape	Miss Blanche Canon	San Luis Obispo .....	.....
Painting in oil, landscape	Miss Blanche Canon	San Luis Obispo .....	.....
Painting in oil, landscape	Miss Blanche Canon	San Luis Obispo .....	.....
Painting in oil, landscape	Miss Littlefield	Oakland .....	.....
Painting in oil, landscape	Miss Littlefield	Oakland .....	.....
Painting in oil, landscape	Mrs. W. H. Warden	San Luis Obispo .....	.....
Painting in oil, landscape	Miss Cora B. Russell	San Luis Obispo .....	.....
Painting in oil, portrait	Mrs. W. H. Warden	San Luis Obispo	\$10 00
Painting in oil, portrait	May Hathaway	San Luis Obispo .....	.....
Water colors (fruit)	May Hathaway	San Luis Obispo	\$10 00
Water colors (flowers)	Mrs. H. E. McBride	San Luis Obispo .....	.....
Water colors (flowers)	Mrs. H. E. McBride	San Luis Obispo .....	.....
Water colors (flowers)	May Hathaway	San Luis Obispo	\$10 00
Water colors (landscape)	Lolo Ward	San Luis Obispo .....	.....
Kindergarten work	Hesperia School District	Cambria .....	.....
Crayon portrait	Miss B. Canon	San Luis Obispo	\$5 00
Crayon portrait	Miss B. Canon	San Luis Obispo .....	.....
Painting in oil (flowers)	Miss Katie Knapp	San Luis Obispo .....	.....
Painting in oil (flowers)	E. L. Dickerson	San Luis Obispo .....	.....
Painting in oil (flowers)	Lolo Ward	San Luis Obispo .....	.....
Painting in oil (flowers)	May Hathaway	San Luis Obispo .....	.....

LADIES' DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Fire screen	Miss Cora B. Russell	San Luis Obispo.	.....
China plaques	Miss Cora B. Russell	San Luis Obispo.	.....
Landscape painting in oil	Mrs. W. M. York	San Luis Obispo.	.....
Landscape painting in oil	Mrs. W. M. York	San Luis Obispo.	.....
Landscape painting in oil	Mrs. W. M. York	San Luis Obispo.	.....
Landscape painting in oil	Mrs. W. M. York	San Luis Obispo.	.....
Landscape painting in oil	Lolo Ward	San Luis Obispo.	.....
Kensington painting	E. L. Dickerson	San Luis Obispo.	.....
Painted ice cream set	Mrs. C. H. Reed	San Luis Obispo.	.....
Kensington painting	Mrs. H. E. McBride	San Luis Obispo.	.....
Kensington painting	Miss Littlefield	Oakland	.....
Crayon landscape	Miss Mabel King	San Luis Obispo.	\$5 00
Crayon landscape	Miss Mabel King	San Luis Obispo.	.....
Crayon landscape	Miss Mabel King	San Luis Obispo.	.....
Worsted pictures	Miss Annie J. Murphy	San Luis Obispo.	\$2 00
Lompoc exhibit	E. W. Broughton	San Luis Obispo	Dip., \$25.
Bartlett pears	C. W. Wilson	San Luis Obispo.	\$2 50
Fine peaches	Lascano Bros.	Pozo	\$2 50
Extra peaches	James Kelly	San Luis Obispo.	Dip., \$2 50
Almonds from Abbott Ranch	E. Goodall	San Francisco	\$3 00
Feather work	Mrs. J. C. Stocking	Moro	\$2 00
Wool work pictures	Mrs. E. Watkins	San Luis Obispo	\$2 00
Suits of clothes	Sinsheimer Bros.	San Luis Obispo.	\$5 00
Brick, one hundred or more	H. J. Dutton	San Luis Obispo	\$5 00
Decorative woodwork	Mrs. R. A. Loomis	San Luis Obispo.	\$2 00
Decorative woodwork	Geo. Van Gorden	San Simeon	\$5 00
Decorative woodwork	Thomas Welsh	San Luis Obispo.	.....
Double carriage harness	J. P. Hoefer & Co.	San Luis Obispo.	\$5 00
Single carriage harness	J. P. Hoefer & Co.	San Luis Obispo.	\$5 00
Iron articles	Mrs. J. M. Vincent	San Luis Obispo.	\$5 00
Saddles	J. P. Hoefer & Co.	San Luis Obispo.	\$5 00
Stone cutting	Park & Bolt	Nipomo	\$2 00
Stone cutting	J. S. Rice	Arroyo Grande	.....
Taxidermist's display	Bessie and Adell Woods	San Luis Obispo.	\$5 00
Scroll sawing	Thomas Welsh	San Luis Obispo.	\$5 00
Scroll sawing	Thomas Welsh	San Luis Obispo.	.....
Two-horse wagon	E. J. Kay	San Luis Obispo.	\$5 00
Jelly stand	Mrs. H. M. Warden	San Luis Obispo.	.....
Case of horseshoes	C. A. Younglove	San Luis Obispo.	\$5 00
Mechanical skill	Arthur Stewart	San Luis Obispo.	\$2 00
Mechanical skill	J. E. Lewis	San Luis Obispo.	\$2 00
Mechanical skill	J. E. Lewis	San Luis Obispo.	.....
Dental specimens	Dr. W. S. Richey	San Luis Obispo.	.....

MUSICAL INSTRUMENTS.

Article Exhibited.	Exhibitor.	Address.	Award.
Banjos	Miss Cora B. Russell	San Luis Obispo.	\$5 00
Organ	J. S. Riggs	San Luis Obispo.	Diploma.
Organ	J. S. Riggs	San Luis Obispo.	.....
Organ	J. S. Riggs	San Luis Obispo.	.....
Organ	J. S. Riggs	San Luis Obispo.	.....
Three pianos	J. S. Riggs	San Luis Obispo.	Diploma.

FRUITS.

Article Exhibited.	Exhibitor.	Address.	Award.
Apples	J. T. Walker	San Luis Obispo.	
Apples, three varieties	J. L. Armstrong	San Luis Obispo.	
Apples	M. J. Lopez	San Luis Obispo.	
Apples	S. C. Davis	Moro	
Apples	E. W. Steele	Edna	
Apples	Uriah Porter	San Luis Obispo.	
Apples	Mrs. J. H. Orcutt	San Luis Obispo.	
Apples	E. A. Atwood	San Luis Obispo.	\$10 00
Apples	McD. R. Venable	San Luis Obispo.	
Apples	A. M. Kurtz	San Luis Obispo.	
Blackberries	J. V. N. Young	Arroyo Grande	
Blackberries	J. S. Rice	Arroyo Grande	\$2 50
Grapes	P. Tartaglia	Adelaide	
Grapes	Goldtree Bros.	San Luis Obispo.	
Grapes, three varieties	J. V. Webster	Creston	
Grapes	J. P. Andrews	San Luis Obispo.	\$7 50
Grapes	H. J. Dutton	San Luis Obispo.	
Grapes	J. H. Orcutt	San Luis Obispo.	
Grapes	Wm. Sandercock	San Luis Obispo.	
Lemons	J. P. Andrews	San Luis Obispo.	
Lemons	A. R. Hathaway	San Luis Obispo.	
Limes	A. R. Hathaway	San Luis Obispo.	
Oranges	J. P. Andrews	San Luis Obispo.	
Oranges	E. Leedham	Arroyo Grande	\$5 00
Pears	P. Tartaglia	Adelaide	
Pears	M. J. Lopez	San Luis Obispo.	
Pears	S. C. Davis	Moro	
Pears	J. H. Orcutt	San Luis Obispo.	
Pears	A. M. Kurtz	San Luis Obispo.	
Pears	J. V. Webster	Creston	
Pears	H. J. Dutton	San Luis Obispo.	
Pears	J. H. Orcutt	San Luis Obispo.	
Pears	M. J. Lopez	San Luis Obispo.	
Pears	J. V. N. Young	Arroyo Grande	
Pears	W. W. Broughton	Lompoc	
Pears	Sinsheimer Bros.	San Luis Obispo.	
Peaches	P. Tartaglia	Adelaide	
Peaches	Azra Porter	Huasna	
Peaches	Mrs. D. Lowe	San Luis Obispo.	
Peaches	McD. R. Venable	San Luis Obispo.	
Peaches	Goldtree Bros.	San Luis Obispo.	
Peaches, two varieties	J. V. Webster	Creston	
Peaches	J. V. N. Young	Arroyo Grande	
Peaches	James Kelly	San Luis Obispo.	
Peaches	J. P. Andrews	San Luis Obispo.	
Strawberries, two varieties	C. B. Tulley	San Luis Obispo.	
Strawberries	J. V. N. Young	Arroyo Grande	\$2 50
Plums	E. Leedham	Arroyo Grande	\$5 00
Prunes	E. Leedham	Arroyo Grande	
Quince apples	C. B. Tulley	San Luis Obispo.	
Quinces	J. L. Armstrong	San Luis Obispo.	
Quinces	Uriah Porter	San Luis Obispo.	
Quinces	McD. R. Venable	San Luis Obispo.	
Quinces	J. V. N. Young	Arroyo Grande	
Quinces	J. H. Orcutt	San Luis Obispo.	
Quinces	W. W. Broughton	Lompoc	
Quinces	E. Leedham	Arroyo Grande	
Pomegranates	M. J. Lopez	San Luis Obispo.	
Pomegranates	Mr. Moreland	San Luis Obispo.	
Figs	William Evans	San Luis Obispo.	
Figs	Sinsheimer Bros.	San Luis Obispo.	
Apples	E. Boreland	Miles Station	
Apples	J. P. Andrews	San Luis Obispo.	
Apples	J. M. Huyek	San Luis Obispo.	
Apples	J. H. Orcutt	San Luis Obispo.	
Apples	J. V. N. Young	Arroyo Grande	\$2 50
Apples	W. W. Broughton	Lompoc	
Apples	A. C. Gibson	San Luis Obispo.	

FRUITS—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Apples	Sinsheimer Bros.	San Luis Obispo	.....
Apples	E. Leedham	Arroyo Grande	\$5 00
Crabapples	J. V. N. Young	Arroyo Grande	.....
Pears	E. Leedham	Arroyo Grande	\$5 00
Pears	J. P. Andrews	San Luis Obispo	.....
CANNED FRUITS AND JELLIES IN GLASS.			
Canned fruit	Mrs. D. Lowe	San Luis Obispo	.....
Canned fruit	Mrs. J. C. Stocking	Moro	\$5 00
Dried fruit	E. W. Steele	Edna	\$7 50
Dried fruit	Will. Findley	Arroyo Grande	.....
Jams in glass	Mrs. D. Lowe	San Luis Obispo	.....
Jams in glass	Mrs. J. C. Stocking	Moro	\$2 50
Jellies in glass	Mrs. D. Lowe	San Luis Obispo	.....
Jellies in glass	M. J. Lopez	San Luis Obispo	.....
Jellies in glass	Mrs. J. H. Orcutt	San Luis Obispo	.....
Jellies in glass	Captain O. Root	Miles Station	.....
Jellies in glass	Mrs. J. C. Stocking	Moro	\$2 50
Jellies in glass	Mrs. N. J. Abbott	San Luis Obispo	.....
Apple jelly	Mrs. H. M. Warden	San Luis Obispo	\$2 50
Preserved fruit in glass	Mrs. J. C. Stocking	Moro	\$2 50
Sweet pickles	Mrs. J. C. Stocking	Moro	\$2 50
Plum jelly	Mrs. H. M. Warden	San Luis Obispo	\$2 50
Crabapple jelly	Mrs. H. M. Warden	San Luis Obispo	.....
Crabapple and blackberry jelly	Mrs. H. M. Warden	San Luis Obispo	.....
Quince jelly	Mrs. H. M. Warden	San Luis Obispo	.....
Catsup of four varieties	J. B. Meacham	Huasna	.....
Catsup	Mrs. J. C. Stocking	Moro	\$2 50
FLOWERS.			
Basket flowers	Ger'ude Sinsheimer	San Luis Obispo	.....
Basket flowers	Geo. O. Taylor	Arroyo Grande	.....
Flowering plants	Mrs. Brumley	San Luis Obispo	\$5 00
Hand bouquet	Geo. O. Taylor	Arroyo Grande	\$5 00
Parlor bouquet	Ger'ude Sinsheimer	San Luis Obispo	.....
Parlor bouquet	Geo. O. Taylor	Arroyo Grande	\$5 00
Parlor bouquet	Mrs. G. Richmond	San Luis Obispo	.....
Roses—named	Geo. O. Taylor	Arroyo Grande	\$2 00
Sunflower	David Andrews	San Luis Obispo	.....
Sunflower	Captain O. Root	Miles Station	\$1 00

MINERALOGICAL.

Article Exhibited.	Exhibitor.	Address.	Award.
Petrified wood	Mrs. J. M. Vincent	San Luis Obispo	.....
Stalagmite	Mrs. J. M. Vincent	San Luis Obispo	.....
Stalagmite	G. H. Andrews	San Luis Obispo	.....
Bituminous rock	F. Adams	San Luis Obispo	Diploma.
Minerals	Newson School District	Arroyo Grande	.....
Minerals	Wm. Copeland	San Luis Obispo	.....
Minerals	Naomi Canon	San Luis Obispo	\$2 00
Limestone	P. Tartaglia	Adelaide	.....
Onyx	Sidney Sinsheimer	San Luis Obispo	.....

BABIES.

Article Exhibited.	Exhibitor.	Address.	Award.
Prettiest baby over six months old and under twelve	Leroy Emerson ...	San Luis Obispo. ....	.....
Prettiest baby over six months old and under twelve	David Thaler	San Luis Obispo. ....	.....
Prettiest baby over six months old and under twelve	R. P. Sutcliffe	San Luis Obispo.	\$15 00
Prettiest baby over six months old and under twelve	Mrs. Inda Brown ..	San Luis Obispo.	\$3 50
Biggest baby under twelve months old ..	Geo. M. Frink	San Luis Obispo. ....	.....
Biggest baby under twelve months old ..	Thomas Wallis	San Luis Obispo.	\$3 50

MERCHANDISE.

Article Exhibited.	Exhibitor.	Address.	Award
Boots and shoes	Crocker Bros.	San Luis Obispo.	\$5 00
Dry goods	Crocker Bros.	San Luis Obispo.	\$5 00
Fancy goods	Crocker Bros.	San Luis Obispo.	\$5 00
General display	Crocker Bros.	San Luis Obispo.	\$5 00
Clothing	Crocker Bros.	San Luis Obispo.	\$5 00

SPEED PROGRAMME.

TUESDAY, SEPTEMBER 18, 1888.

RACE No. 1—TROTTING.

For three-year olds owned in San Luis Obispo County. Five to enter and three to start. Purse, two hundred dollars; one hundred dollars added if 2:40 is beaten. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Miss Monroe, b. m., by Monroe Chief	Brown & Taylor	San Luis Obispo.
Frankie, g. m., by Altoona	George Van Gorden	San Simeon.
Estella C, blk. m., by Director	E. W. Steele	Edna.

SUMMARY.

Miss Monroe	1	1	1
Frankie	2	2	3
Estella C	3	3	2

Time—2:41; 2:45; 2:43.

RACE No. 2—TROTTING.

Colt Stakes for two-year olds. Five to enter and three to start. Entrance fee, thirty dollars; to which the Association adds one hundred dollars. For colts in Santa Barbara, Monterey, and San Luis Obispo Counties. Mile heats; two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Monroe S, by Monroe Chief	Brown & Taylor	San Luis Obispo.
Clearmount, by Maginnis	George Van Gorden	San Simeon.
Alta, by Altoona	Smith & Ferguson	Santa Maria.

SUMMARY.

Clearmount	1	1
Monroe S	2	2
Alta	3	3

Time—3:00; 2:57½.

RACE No. 3—TROTTING.

For horses owned in Santa Cruz, Monterey, Santa Barbara, and San Luis Obispo Counties. Five to enter and three to start. Purse, five hundred dollars. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Rosewald, g. s.	T. A. Storke	Santa Barbara.
Jim L, c. s.	J. Linscott	Watsonville.
Commodore Nutwood, b. s.	Harry Seig	San Luis Obispo.
Kappoch, s. s.	W. McDonald	San Miguel.
Fred Arnold, blk. s.	— Allbright	San Luis Obispo.

SUMMARY.

Jim L	1	1
Rosewald	2	2

Time—2:35; 2:28; 2:30½.

WEDNESDAY, SEPTEMBER 19, 1888.

RACE No. 4—RUNNING.

Free to all. Weight to age. Purse, one hundred and twenty-five dollars. Half mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Hit or Miss, b. m., by Red	John M. Price	San Luis Obispo.
Sid Law	E. R. Den	Los Alamos.
Paloma	George Van Gorden	San Simeon.
Sleepy Dick	George Nicholson	Pozo.

SUMMARY.

Sid Law	1
Hit or Miss	2
Paloma	3
Sleepy Dick	4

Time—0.50½.

RACE No. 5—RUNNING.

Purse, two hundred dollars. One mile dash for horses owned in Monterey, Santa Cruz, Santa Barbara, and San Luis Obispo Counties. Five to enter and three to start.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Elsie B	George Van Gorden	San Simeon.
Gladstone	E. R. Den	Los Alamos.
Lady R	Phil. Collins	

SUMMARY.

Gladstone	1
Elsie B	2
Lady R	3

Time—1:46.

RACE No. 6—RUNNING.

For three-year olds and under. Purse, one hundred and fifty dollars. Three-quarter mile dash. Weight for age. Five to enter and three to start.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Paloma	George Van Gorden	San Simeon.
Hit or Miss	J. M. Price	San Luis Obispo.
Kittie C	Cavanaugh Bros.	Monterey.

TRANSACTIONS OF THE

SUMMARY.

Hit or Miss	1
Paloma	2
Kittie C	3

Time—1:18 $\frac{3}{4}$.

RACE No. 7—SPECIAL TROTTING.

Purse, two hundred dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Topsy	George Smith .....	.....
Lina H	George Van Gorden	San Simeon.
May Queen	Charles Merritt .....	.....
Nigger Baby	Arza Porter	Huasna.
Stone	H. Moskovitz	San Luis Obispo.

SUMMARY.

Nigger Baby	2	1	1	1
May Queen	1	3	2	2
Topsy	3	2	3	3
Lena H	4	4	4	4
Stone	5	5	5	5

Time—2:36; 2:37; 2:38; 2:37 $\frac{1}{2}$.

THURSDAY, SEPTEMBER 20, 1888.

RACE No. 8—RUNNING.

Free for all. Purse, two hundred dollars. Five-eighths mile dash. Weight to age.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Enterprise	E. Price .....	.....
Lady R	Phil. Collins .....	.....
Elsie B	George Van Gorden	San Simeon.
Sid Law	E. R. Den	Los Alamos.
Martinez	J. Rochine .....	.....

SUMMARY.

Elsie B	1
Enterprise	2
Martinez	3
Lady R	4
Sid Law	5

Time—1:06.

RACE No. 9—TROTTING.

3:00 Class. Purse, one hundred and fifty dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Bay Billy	Harry Seig	San Luis Obispo.
Duke, Jr.	J. Ferguson	San Luis Obispo.
Bonner	C. L. Woods	San Luis Obispo.

SUMMARY.

Bay Billy	2	1	2	1	1
Bonner	1	2	1	2	2
<i>Time</i> —2:52; 3:01½; 2:58; 3:01; 3:01.					

RACE No. 10—TROTTING.

For named horses. Purse, one hundred dollars. Best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Stone	H. Moskovitz	San Luis Obispo.
Tamboline	Geo. Van Gorden	San Simeon.

SUMMARY.

Tamboline	1	1	1
Stone	2	2	2
<i>Time</i> —2:50; 2:43; 2:40.			

FRIDAY, SEPTEMBER 21, 1888.

RACE No. 11—RUNNING.

Purse, one hundred and fifty dollars. One half mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Kitty C	Cavanaugh Bros. ....	.....
Paloma	Geo. Van Gorden	San Simeon.
Dante	C. R. Callender	San Luis Obispo.
Martinez	J. Rochine .....	.....

SUMMARY.

Martinez	1
Paloma	2
Kitty C	3
Dante	4

RACE No. 12—RUNNING.

For two-year olds. Purse, one hundred dollars. Half-mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Pirate	Cavanaugh Bros. ....	.....
Miama	Alex. Smiden .....	.....
Carrie C	C. Rodriguez .....	.....

SUMMARY.

Pirate	1
Carrie C	2
Miama	3

Time—0:53½.

RACE NO. 13—NOVELTY RUNNING.

Purse, one hundred and twenty-five dollars. First quarter, twenty-five dollars; and first horse at each quarter, twenty-five dollars additional. One and one quarter miles dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Elsie B.	George Van Gorden	San Simeon.
Wild Bill	George Van Gorden	San Simeon.
Enterprise	E. Price	
Hit or Miss	J. M. Price	San Luis Obispo.

SUMMARY.

Elsie B.	First quarter.
Elsie B.	Second quarter.
Hit or Miss	Third quarter.
Hit or Miss	Fourth quarter.
Hit or Miss	Fifth quarter.

Time—2:22½.

RACE NO. 14—SADDLE HORSE RACE.

Purse, fifty dollars. Half-mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Sleepy Dick	George Nicholson	
Slippery Jim	William Forrester	
Snowball	John Scott	
Bill	Garcia	

SUMMARY.

Sleepy Dick	1
Snowball	2
Slippery Jim	3
Bill	4

Time—0:56.

SATURDAY, SEPTEMBER 22, 1888.

RACE NO. 15—TROTTING.

Purse, two hundred dollars.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Topsy	George Smith	
May Queen	Charles Merritt	
Lena H.	George Van Gorden	San Simeon.

SUMMARY.

Lena H.	1	2	1	1
Topsy	2	1	2	2
May Queen	3	3	3	3

Time—2:36; 2:35½; 2:37½; 2:39.

RACE No. 16—TROTTING.

Free for all. Purse, two hundred and fifty dollars.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Jim Blaine.....	N. Covarrubias.....	.....
Jim L.....	J. Lenscott.....	.....

SUMMARY.

Jim L.....	1	1	1
Jim Blaine.....	2	2	2

Time—2:29; 2:30; 2:28.

RACE No. 17—TROTTING.

2:40 Class.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Miss Monroe.....	Brown & Taylor.....	San Luis Obispo.
Stone.....	C. Lee.....	San Luis Obispo.
Tamboline.....	Geo. Van Gorden.....	San Simeon.

SUMMARY.

Miss Monroe.....	1	1	1
Stone.....	2	3	0
Tamboline.....	3	2	0

Time—2:41; 2:40; 2:41.

RACE No. 18—TROTTING.

For yearlings. Purse, twenty dollars. Half-mile heats; best two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Billy Nutwood.....	H. Sieg.....	San Luis Obispo.
Dodgers.....	H. Petty.....	San Luis Obispo.

SUMMARY.

Billy Nutwood.....	1
Dodgers.....	dis.

Time—2:01.

TRANSACTIONS

OF THE

SEVENTEENTH DISTRICT AGRICULTURAL ASSOCIATION

For the Year 1888,

Composed of the Counties of Nevada and Placer.

OFFICERS OF THE ASSOCIATION.

SAMUEL GRANGER.....	President.
GEORGE FLETCHER.....	Secretary.
E. M. PRESTON.....	Treasurer.

DIRECTORS.

C. R. CLARKE.....	Nevada City, Nevada County.
M. L. MARSH	Nevada City, Nevada County.
I. J. ROLFE.....	Nevada City, Nevada County.
A. B. DRIESBACH.....	Indian Springs, Nevada County.
C. H. MITCHELL.....	Grass Valley, Nevada County.
SAMUEL GRANGER.....	Grass Valley, Nevada County.
W. B. HAYFORD.....	Colfax, Placer County.
E. W. MASLIN.....	Loomis, Placer County.

REPORT.

GRASS VALLEY, December 31, 1888.

To the honorable the State Board of Agriculture:

GENTLEMEN: The Directors of the Seventeenth District Agricultural Association submit this, their report of the transactions of said association, for the year ending this date.

GEORGE FLETCHER, Secretary.

RECEIPTS AND EXPENDITURES.

Receipts.

From contributions—Nevada City	\$240 00	
Grass Valley	245 00	
Premiums returned	20 00	
		\$505 00
From insurance premium returned		100 00
From Directors note		300 00
From exhibitors and hack badges		166 00
At Park—3,369 single admission tickets	\$1,684 50	
232 half admission tickets	58 00	
Grand stand, 486 tickets at 25 cents	121 50	
		1,864 00
At Pavilion—2,378 tickets at 25 cents	\$594 50	
Lumber sold	40 23	
		634 73
Privileges sold—Bar	\$875 00	
Restaurant	125 50	
Ice cream and candy stand	60 00	
Percentage on pools sold	293 10	
Privilege at pavilion	10 00	
Other privileges at park	289 96	
		1,653 56
Entrees and forfeits to races		1,225 00
Interest received from National Trotting Association		9 80
State appropriation		2,000 00
Fines and penalties from horsemen		205 00
		\$8,663 09

Expenditures.

Maintenance of track and buildings	\$236 65	
		\$236 65
Park expenses—Gatekeepers and ticket sellers	\$145 00	
Watchmen and police	158 00	
Judges, entry clerks, and clerk of course	135 00	
Feed and bedding for stock	247 52	
Ribbons	7 00	
		692 52
Rent		750 00
Superintendence		54 00
Premiums on stock exhibits		415 50
Purses for races		3,615 00

Pavilion expenses—Doorkeepers and ticket sellers.....	\$45 00	
Watchmen and police.....	57 50	
Entry clerks.....	25 00	
Preparing hall for exhibits.....	157 06	
Gas.....	22 25	
Ribbons.....	2 25	
Superintendent.....	50 00	
		\$359 06
Premiums on exhibits at pavilion.....		543 00
General expenses—Stationery, advertising, and printing.....	\$707 76	
Dues, National Trotting Association.....	56 00	
Ice.....	26 40	
Legal services and expenses.....	55 00	
Office expenses, stamps, etc.....	37 90	
Interest on note and floating debt.....	60 21	
Music.....	220 00	
		1,163 27
Fines remitted National Trotting Association.....		205 00
Directors note paid.....		500 00
Overdraft December 31, 1887.....		70 79
Balance cash on hand.....		58 30
		<u>\$8,663 09</u>

Indebtedness.

Directors note to Citizens Bank.....	\$300 00	
Other bills payable.....	549 27	
		\$849 27
Less cash on hand.....		58 30
Net debt.....		\$790 97

EXHIBITS AT THE FAIR—1888.

FIRST DEPARTMENT.

Name of Animal.	Owner.	Address.
CLASS I—THOROUGHBREDS—STALLIONS.		
Nick of the Woods, three years old or over.....	A. D. West.....	Grass Valley.
Glenbrook, one year old.....	A. D. West.....	Grass Valley.
MARES.		
Emma Nevada, one year old.....	A. D. West.....	Grass Valley.
CLASS III—STALLIONS, GELDINGS, AND MARES OF ALL WORK.		
Lucy, three years old or over.....	W. Hashagan.....	Auburn.
Billy Dick, three years old or over.....	Dan. C. Smith.....	Sheridan.
Dolly, three years old or over.....	J. R. Nickerson.....	Auburn.
Sheridan, two years old.....	Auguste Combe.....	Clipper Gap.
CLASS IV—ROADSTERS—STALLIONS.		
Gen. Hamilton, three years old or over.....	A. D. West.....	Grass Valley.
Revolution, Jr., two years old.....	W. C. Jones.....	Grass Valley.
Bummer, two years old.....	G. W. Shearer.....	Nevada City.
Brunswick, two years old.....	J. R. Nickerson.....	Auburn.
Mike Wilkes, one year old.....	M. C. Hogan.....	North San Juan.
Mollie, colt under one year.....	J. R. Nickerson.....	Auburn.
MARES.		
Nellie S, three years old or over.....	A. D. West.....	Grass Valley.
Beatrice, three years old or over.....	E. C. Morgan.....	Grass Valley.
CLASS V—DRAFT HORSES—STALLIONS, GELD- INGS, OR MARES.		
Napoleon, four years old or over.....	W. Hashagan.....	Auburn.
Dave, four years old or over.....	W. Hashagan.....	Auburn.
Jane, four years old or over.....	Richard Noell.....	Grass Valley.
Prince, four years old or over.....	J. H. Nile.....	Rough and Ready.
Belle, three years old.....	Richard Noell.....	Grass Valley.
Prince, two years old.....	W. Hashagan.....	Auburn.
CLASS VI—CARRIAGE HORSES.		
Jennie Lind, single buggy horse.....	Mrs. Jas. Watt.....	Grass Valley.
Reuben, single buggy horse.....	Dorsey Wheeler.....	Grass Valley.
Fred, single buggy horse.....	Al. Morgan.....	Grass Valley.
CLASS I—THOROUGHBRED CATTLE—JERSEY AND ALDERNEY—BULLS.		
Coin, three years old or over.....	Jas. R. Vineyard.....	Anthony House.
Major, three years old or over.....	Richard Noell.....	Grass Valley.
Nevada Chief, two years old.....	Morris M. Green.....	Nevada City.
COWS.		
Katie, three years old or over.....	Richard Noell.....	Grass Valley.
Lucy, three years old or over.....	Richard Noell.....	Grass Valley.
Maud S, two years old.....	Richard Noell.....	Grass Valley.
Jersey Belle, two years old.....	Richard Noell.....	Grass Valley.
Daisy, one year old.....	Richard Noell.....	Grass Valley.
CLASS II—DURHAMS—BULLS.		
St. Peter, two years old.....	John Casey.....	Rough and Ready.
COWS.		
Forest Rose 2d, three years old or over.....	H. B. Nicholls.....	Grass Valley.

TRANSACTIONS OF THE
FIRST DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
CLASS III—AYRSHIRES—BULLS.		
Menlo, three years old or over	H. B. Nicholls	Grass Valley.
Pride of Grass Valley, one year old	H. B. Nicholls	Grass Valley.
COWS.		
Lady Scarboro, three years old or over	H. B. Nicholls	Grass Valley.
Eudora, three years old or over	H. B. Nicholls	Grass Valley.
Bonnie Belle, three years old or over	H. B. Nicholls	Grass Valley.
Annie Laurie, two years old	H. B. Nicholls	Grass Valley.
Nellie Boyd, one year old	H. B. Nicholls	Grass Valley.
Nellie Bly, one year old	H. B. Nicholls	Grass Valley.
Bonnie Maid, calf	H. B. Nicholls	Grass Valley.
CLASS IV—HOLSTEINS—BULLS.		
Tehama, three years old or over	H. B. Nicholls	Grass Valley.
Tickler, two years old	W. C. Jones	Grass Valley.
Barbara Prince, one year old	H. B. Nicholls	Grass Valley.
Pride of California, one year old	H. B. Nicholls	Grass Valley.
Rough and Ready, calf	H. B. Nicholls	Grass Valley.
Prince los Flores, calf	H. B. Nicholls	Grass Valley.
Barbara Royal, calf	H. B. Nicholls	Grass Valley.
Rought, calf	W. C. Jones	Grass Valley.
COWS.		
Barbara Maid, three years old or over	H. B. Nicholls	Grass Valley.
Los Flores, three years old or over	H. B. Nicholls	Grass Valley.
Infelice, two years old	H. B. Nicholls	Grass Valley.
Barbara Beauty, calf	H. B. Nicholls	Grass Valley.
SWEEPSTAKES—BULLS.		
Menlo (Ayrshire) and four cows	H. B. Nicholls	Grass Valley.
Tehama (Holstein) and four cows	H. B. Nicholls	Grass Valley.
Major (Jersey) and four cows	R. Noell	Grass Valley.
GRADED CATTLE—COWS.		
Topsy (sixty-three sixty-fourths Jersey), three years old or over	H. B. Nicholls	Grass Valley.
Nevada (one half Holstein), three years old or over	H. B. Nicholls	Grass Valley.
Cypress (one half Ayrshire), two years old	H. B. Nicholls	Grass Valley.
Black Muley (one half Holstein), two years old	H. B. Nicholls	Grass Valley.
Verda (one half Holstein), two years old	H. B. Nicholls	Grass Valley.
Sprightly (one half Ayrshire), one year old	H. B. Nicholls	Grass Valley.
Katie (one half Holstein), one year old	H. B. Nicholls	Grass Valley.
Queenie (one half Holstein), one year old	H. B. Nicholls	Grass Valley.
Floy Douglass (one half Ayrshire), calf	H. B. Nicholls	Grass Valley.
Beauty (one half Holstein), calf	H. B. Nicholls	Grass Valley.
Mollie (one half Durham), three years old or over	W. M. Treloar	Grass Valley.
W. B. Mollie (one half Holstein), three years old or over	W. M. Treloar	Grass Valley.
Sallie (three fourths Jersey), two years old	R. Noell	Grass Valley.
Dinah (three fourths Jersey), one year old	R. Noell	Grass Valley.
Prince (seven eighths Jersey), one year old	E. D. Bridges	Nevada City.
Pet (three fourths Jersey), calf	R. Noell	Grass Valley.
CLASS I—HOGS.		
Tom Bourne, boar of any age	John Montgomery	Rough and Ready.
Thorne, boar of any age	R. Noell	Grass Valley.
Emma C, breeding sow of any age	John Montgomery	Rough and Ready.
Jessie, breeding sow of any age	R. Noell	Grass Valley.
Berkshire sow and five pigs	R. Noell	Grass Valley.
Mollie S and family	John Montgomery	Rough and Ready.

PREMIUMS AWARDED—1888.

FIRST DEPARTMENT.

Name of Animal.	Owner.	Address.	Award.
CLASS I—THOROUGHbred HORSES.			
Nick of the Woods, stallion	A. D. West.....	Grass Valley	\$25 00
Glenbrook, colt, one year old	A. D. West.....	Grass Valley	\$10 00
Emma Nevada, filly, one year old	A. D. West.....	Grass Valley	\$5 00
CLASS III—STALLIONS, GELDINGS, AND MARES OF ALL WORK.			
Billy Dick, stallion	Daniel Smith.....	Sheridan	\$7 50
Dolly, mare	J. R. Nickerson.....	Auburn	\$7 50
Lucy, mare	Wm. Hashagan.....	Auburn	\$5 00
Sheridan, colt, one year old	Auguste Combe.....	Clipper Gap	\$2 50
CLASS IV—ROADSTERS, STALLIONS, GELD- INGS, AND MARES.			
General Hamilton, stallion	A. D. West.....	Grass Valley	\$10 00
Revolution, Jr., stallion, two years old	W. C. Jones	Grass Valley	\$7 50
Bummer, stallion, two years old	G. W. Shearer	Nevada City	\$5 00
Brunswick, stallion, two years old	J. R. Nickerson.....	Auburn	\$5 00
Mike Wilkes, colt, one year old	M. C. Hogan	North San Juan	\$3 00
Mollie, filly, under one year	J. R. Nickerson.....	Auburn	\$2 50
Beatrice, mare	E. C. Morgan	Grass Valley	\$10 00
Nellie, mare	A. D. West.....	Grass Valley	\$7 50
CLASS V—DRAFT HORSES—STALLIONS, GELD- INGS, OR MARES.			
Napoleon, gray stallion	Wm. Hashagan	Auburn	\$10 00
Dave, gray stallion	Wm. Hashagan	Auburn	\$10 00
Prince, sorrel stallion	Wm. Hashagan	Auburn	\$5 00
Jane, gray mare	Richard Noell.....	Grass Valley	\$10 00
Belle, black mare	Richard Noell.....	Grass Valley	\$8 00
Prince, black stallion	J. H. Nile	R'h and Ready	\$5 00
CLASS VI—CARRIAGE HORSES.			
Jennie Lind, gray mare	Mrs. Jas. Watt	Grass Valley	\$7 50
Reuben, sorrel stallion	Dorsey Wheeler	Grass Valley	\$5 00
SWEEPSTAKES—BEST STALLION OF ANY AGE OR BREED.			
Billy Dick, black stallion	Daniel Smith	Sheridan	Diploma.
CLASS I—THOROUGHbred CATTLE—JER- SEYS—BULLS.			
Coin	Jas. R. Vineyard	Anthony House	\$10 00
Nevada Chief, two years old	Morris M. Green	Nevada City	\$7 50
Major, three years old	Richard Noell.....	Grass Valley	\$7 50
COWS.			
Katie	Richard Noell.....	Grass Valley	\$7 50
Lucy	Richard Noell.....	Grass Valley	\$5 00
Jersey Belle, two years old	Richard Noell.....	Grass Valley	\$6 00
Maud S, two years old	Richard Noell.....	Grass Valley	\$4 00
Daisy, one year old	Richard Noell.....	Grass Valley	\$3 00
CLASS II—DURHAMS—BULLS.			
St. Peter	John Casey	R'h and Ready	\$7 50
COWS.			
Forest Rose 2d	H. B. Nicholls.....	Grass Valley	\$7 50

FIRST DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
CLASS III—AYRSHIRES—BULLS.			
Menlo	H. B. Nicholls	Grass Valley	\$10 00
Pride of Grass Valley, calf, one year old	H. B. Nicholls	Grass Valley	\$3 00
COWS.			
Lady Scarboro	H. B. Nicholls	Grass Valley	\$5 00
Bonnie Belle	H. B. Nicholls	Grass Valley	\$7 50
Annie Laurie	H. B. Nicholls	Grass Valley	\$6 00
Nellie Boyd, one year old	H. B. Nicholls	Grass Valley	\$3 00
Nellie Bly, one year old	H. B. Nicholls	Grass Valley	Diploma.
Bonnie Maid, heifer calf	H. B. Nicholls	Grass Valley	Diploma.
CLASS IV—HOLSTEINS—BULLS.			
Tehama	H. B. Nicholls	Grass Valley	\$10 00
Tickler	W. C. Jones	Grass Valley	\$7 50
Barbara Prince, one year old	H. B. Nicholls	Grass Valley	\$3 00
Pride of California, one year old	H. B. Nicholls	Grass Valley	Diploma.
Rought, calf	W. C. Jones	Grass Valley	Diploma.
COWS.			
Barbara Maid	H. B. Nicholls	Grass Valley	\$7 50
Los Flores	H. B. Nicholls	Grass Valley	\$5 00
Infelice, two years old	H. B. Nicholls	Grass Valley	\$6 00
Barbara Beauty, calf	H. B. Nicholls	Grass Valley	Diploma.
SWEEPSTAKES.			
Tehama and four cows, Holsteins	H. B. Nicholls	Grass Valley	\$10 00
Major and four cows, Jerseys	Richard Noell	Grass Valley	\$10 00
GRADED CATTLE.			
Topsy (sixty-three sixty-fourths Jersey)	H. B. Nicholls	Grass Valley	\$7 50
Cypress (one half Ayrshire)	H. B. Nicholls	Grass Valley	\$6 00
Sprightly (Ayrshire)	H. B. Nicholls	Grass Valley	\$5 00
Floy Douglass (Ayrshire)	H. B. Nicholls	Grass Valley	\$3 00
Nevada (Holstein)	H. B. Nicholls	Grass Valley	\$7 50
Black Muley (Holstein)	H. B. Nicholls	Grass Valley	\$6 00
Queenie (Holstein)	H. B. Nicholls	Grass Valley	\$5 00
Mollie (Durham)	Wm. M. Treloar	Grass Valley	\$7 50
Mollie (Holstein and Durham)	Wm. M. Treloar	Grass Valley	\$3 00
Sallie (three fourths Jersey)	Richard Noell	Grass Valley	\$6 00
Dinah (three fourths Jersey)	Richard Noell	Grass Valley	\$5 00
Pet (three fourths Jersey)	Richard Noell	Grass Valley	\$3 00
CLASS I—HOGS.			
Tom Bourne, boar	John Montgomery	R'h and Ready	\$5 00
Emma C, sow	John Montgomery	R'h and Ready	\$4 00
Thorne, boar	Richard Noell	Grass Valley	\$3 00
Jessie, sow	Richard Noell	Grass Valley	\$2 00
Bessie and family	Richard Noell	Grass Valley	\$5 00

SECOND DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Model four-stamp battery	B. Dickerman	Nevada City	Diploma.
Amalgamator and pulp machine	A. Tregidgo	Washington	Diploma.
Mitchel pan	G. G. Allan	Nevada City	Diploma.
Hydrant spanner	F. Eilerman	Nevada City	\$2 50
CLASS III.			
Reversible plow	John Ball	R'h and Ready	\$2 50

THIRD DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Best single harness	Jas. Cairns	Nevada City	\$2 50
Best double harness	Jas. Cairns	Nevada City	\$2 50
Best gents' saddle	Jas. Cairns	Nevada City	\$2 50
CLASS IV.			
Bracket and whittling	Henry Aindt	Nevada City	\$2 50
Bracket and whittling	Alf. Fellum	Nevada City	\$2 50
Best set of parlor furniture	Legg & Shaw	Nevada City	\$5 00

FOURTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Best silk embroidery	Miss B. Fletcher	Grass Valley	\$2 50
Best cotton embroidery	Miss B. Valentine	Nevada City	\$2 00
Best arrasene embroidery	Mrs. A. Walrath	Nevada City	\$2 50
Best outline embroidery	Miss J. Brown	Nevada City	\$1 50
Best embroidered piano cover	Miss K. Reinhart	Grass Valley	\$2 50
Best embroidered piano scarf	Mrs. J. M. Hadley	Nevada City	\$2 50
Best embroidered table scarf	Mrs. C. H. Eddy	Nevada City	\$2 50
Best embroidered chair seat	Miss J. Holland	Nevada City	\$2 50
Best embroidered banner	Mrs. A. Walrath	Nevada City	\$2 50
Best embroidered picture	Miss K. Reinhart	Grass Valley	\$2 50
Best fine lace work	Mrs. M. J. Anguin	Nevada City	\$2 00
Best ribbon work	Miss B. Fletcher	Grass Valley	\$2 00
Best braid work	Mrs. E. Osborne	Nevada City	\$2 00
Best applique work	Miss C. Clark	Nevada City	\$2 00
Best chenille work	Mrs. F. G. Beatty	Nevada City	\$2 00
Handsomest crazy quilt	Mrs. W. P. Rogers	Grass Valley	\$3 00
Best ornamental plaque	Mrs. J. B. Shaw	Nevada City	\$2 50
Best toilet set	Miss M. Hook	Nevada City	\$2 50
Handsomest luster painting on plush	Mrs. A. B. Dibble	Grass Valley	\$2 50
Handsomest paper flowers	Miss J. Schwartz	Nevada City	\$2 50
Handsomest fire screen	Miss Jennie Brown	Nevada City	\$2 50
Handsomest pillow shams	Miss Belle Rolfe	Nevada City	\$2 00
Handsomest crocheted skirts	Miss Ella Granger	Grass Valley	\$2 00
Handsomest sofa cushion	Miss Bess. Fletcher	Grass Valley	\$1 50
Handsomest lambrequins	Miss Bess. Fletcher	Grass Valley	\$1 50
Handsomest handkerchief box	Miss Bess. Fletcher	Grass Valley	\$1 50
Handsomest tidy	Mrs. R. M. Hunt	Nevada City	\$1 00
Handsomest collar box	Mrs. Puhlage	Nevada City	\$1 00
Handsomest pincushion	Mrs. J. M. Hadley	Nevada City	\$1 00
Best display of kensington	Miss K. Reinhart	Grass Valley	\$2 50
Best display of canvas work	Mrs. T. W. Carson	Grass Valley	\$2 00
Best display of bead work	Mrs. W. F. Engle- bright	Nevada City	\$1 50
Best display of hair work	Miss Amelia Hook	Nevada City	\$1 00
Best display of ladies' underwear	Mrs. A. Merritt	Nevada City	\$3 00
Best display of infants' clothing	Mrs. J. M. Walling	Nevada City	\$3 00
Best ottoman cover	Mrs. N. P. Brown	Nevada City	\$1 50
Best child's afghan	Mrs. E. Monro	Nevada City	\$2 00
Best hearth rug	Mrs. J. Hackley	Nevada City	\$1 50
Best rag door mat	Mrs. A. Merritt	Nevada City	\$1 50
Best crochet shawl	Mrs. W. S. Stoddard	Grass Valley	\$2 50
Best knit bedspread	Mrs. J. B. Johnson	Nevada City	\$2 00
Best patchwork quilt	Mrs. E. Aitken	Nevada City	\$1 50
Best knit undervest	Miss Ella Granger	Grass Valley	\$1 00
Best pair knit silk stockings	Mrs. F. G. Beatty	Nevada City	\$1 00
Best Mexican work	Miss Belle Rolfe	Nevada City	\$2 50
Largest meritorious display of fancy work by one person	Miss Bess. Fletcher	Grass Valley	\$5 00

FOURTH DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS II.			
Best display of millinery	Mrs. Lester & Crawford	Nevada City	\$2 50
Best calico dress	May Evans	Nevada City	\$3 00
Second best	Alice Caldwell	Nevada City	\$2 00
CLASS III—JUVENILE.			
Best silk embroidery	Miss L. McLean	Grass Valley	\$2 00
Best cotton embroidery	Miss L. McLean	Grass Valley	\$1 50
Best patchwork quilt	Miss J. McRandall	Nevada City	\$1 00
Best crochet work	Miss Leila Murchie	Nevada City	\$1 00
Best silk quilt	Miss A. Merritt	Nevada City	\$2 00
CLASS V.			
Best exhibit of furniture	Legg & Shaw	Nevada City	Diploma.
Best exhibit of dry goods	Mrs. Lester & Crawford	Nevada City	Diploma.
Best fancy chair	Miss L. Maltman	Nevada City	\$2 50
CLASS VI.			
Best display of California leaf and manufactured tobacco	David Bryan	Grass Valley	Dip., \$2 50
CLASS VII.			
Case of butterflies	Miss Minnie Lester	Nevada City	\$2 50

FIFTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Best half bushel of wheat	A. Matteson	Grass Valley	\$2 50
Second best	Frank Morrell	R'h and Ready	\$1 50
Best half bushel of barley	Frank Morrell	R'h and Ready	\$2 50
Second best	J. & F. Montgomery	R'h and Ready	\$1 50
Best half bushel of rye	Dorsey Wheeler	Grass Valley	\$2 50
Second best	Lewis Wheeler	Grass Valley	\$1 50
Best half bushel of corn	Frank Morrell	R'h and Ready	\$2 50
Best exhibit and greatest variety	Frank Morrell	R'h and Ready	\$5 00
CLASS II.			
Best exhibit of Indian corn on stalk	Frank Morrell	R'h and Ready	\$2 50
Second best	J. & F. Montgomery	R'h and Ready	\$1 50
Best exhibit of sweet corn on stalk	Mark Thornton	Grass Valley	\$2 00
Best exhibit of potatoes	Mark Thornton	Grass Valley	\$2 50
Second best	A. Matteson	Grass Valley	\$2 00
Best variety of potatoes (one peck)	Lewis Wheeler	Grass Valley	\$2 50
Best exhibit of onions	Mark Thornton	Grass Valley	\$2 50
Second best	A. Matteson	Grass Valley	\$1 00
Best exhibit of sweet potatoes	John Black	R'h and Ready	\$2 00
Best exhibit of tomatoes	J. R. Nickerson	Auburn	\$2 00
Second best exhibit of tomatoes	J. H. Campbell	Grass Valley	\$1 00
Best exhibit of cabbages	J. R. Nickerson	Auburn	\$1 00
Second best exhibit of cabbages	Mark Thornton	Grass Valley	\$0 50
Best exhibit of watermelons	Edw. Alpers	Nevada City	\$1 00
Best exhibit of muskmelons	J. R. Nickerson	Auburn	\$1 00
Second best exhibit of muskmelons	F. Morrell	R'h and Ready	\$0 50
Best exhibit of parsnips	M. Thornton	Grass Valley	\$1 00
Second best exhibit of parsnips	J. L. Holland	Nevada City	\$0 50
Best exhibit of carrots, stock	Robert Osborne	Nevada City	\$1 00
Second best exhibit of carrots, stock	John Cable	Nevada City	\$0 50
Best exhibit of carrots, table	M. Thornton	Grass Valley	\$1 00
Second best exhibit of carrots, table	John Bost	Nevada City	\$0 50
Best exhibit of cucumbers	David Bryan	Grass Valley	\$1 00
Second best exhibit of cucumbers	Edw. Alpers	Nevada City	\$0 50
Best exhibit of beets, stock	John Cable	Nevada City	\$1 00

FIFTH DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Second best exhibit of beets, stock.....	John Bost.....	Nevada City.....	\$0 50
Best exhibit of beets, table.....	M. Thornton.....	Grass Valley.....	\$1 00
Second best exhibit of beets, table.....	F. Morrell.....	R'h and Ready.....	\$0 50
Best exhibit of dried beans.....	D. Bryan.....	Grass Valley.....	\$1 00
Best quality and greatest variety of garden vegetables.....	M. Thornton.....	Grass Valley.....	\$10 00
Second best quality and greatest variety of garden vegetables.....	J. R. Nickerson.....	Auburn.....	\$5 00
Largest squash.....	Lafayette White.....	Nevada City.....	\$2 00
Second largest squash.....	Mrs. K. Single.....	R'h and Ready.....	\$2 00
Third largest squash.....	M. Thornton.....	Grass Valley.....	\$1 00
CLASS III.			
Best display of ornamental grasses.....	Mrs. E. D. Bridges.....	Nevada City.....	\$1 50
Handsomest bouquet of cut flowers.....	W. C. T. U.....	Nevada City.....	\$1 50
Second handsomest bouquet of cut flowers.....	Mrs. C. C. Weisenberger.....	Nevada City.....	\$1 50
Best display of cut flowers.....	Mrs. C. Barker.....	Grass Valley.....	\$1 50
Best display of cultured grasses.....	H. B. Nicholls.....	Grass Valley.....	\$10 00
Second best display of cultured grasses.....	J. R. Nickerson.....	Auburn.....	\$5 00
CLASS IV.			
Best ten pounds of roll butter.....	F. Morrell.....	R'h and Ready.....	\$5 00
CLASS V.			
Best two loaves of wheat bread.....	Gertrude Hampton (nine years).....	Nevada City.....	\$3 00
Second best two loaves of wheat bread.....	Mrs. V. S. Bradley.....	Nevada City.....	\$2 00
Best biscuits.....	Mrs. V. S. Bradley.....	Nevada City.....	\$2 00
Best doughnuts.....	Mrs. V. S. Bradley.....	Nevada City.....	\$1 50
Best salt-rising bread.....	Mrs. L. M. Caldwell.....	Nevada City.....	\$1 00
Best graham bread.....	Mrs. V. S. Bradley.....	Nevada City.....	\$1 00
Best display and greatest variety of domestic bread.....	Mrs. V. S. Bradley.....	Nevada City.....	\$3 00

SIXTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Best display of apples.....	S. N. Stranahan.....	Nevada City.....	\$10 00
Second best display of apples.....	Mrs. E. D. Bridges.....	Nevada City.....	\$5 00
Third best display of apples.....	N. C. Gillespie.....	Nevada City.....	Diploma.
Best display of pears.....	C. R. Hill.....	Grass Valley.....	\$10 00
Second best display of pears.....	W. B. Stuart.....	Grass Valley.....	\$5 00
Third best display of pears.....	J. L. Holland.....	Nevada City.....	Diploma.
Best display of peaches.....	J. R. Balch.....	Nevada City.....	\$10 00
Second best display of peaches.....	J. R. Nickerson.....	Auburn.....	\$5 00
Best display of plums.....	J. M. Hales.....	Grass Valley.....	\$10 00
Second best display of plums.....	Mrs. W. Arnhart.....	Nevada City.....	\$5 00
Best display of nectarines.....	Mrs. E. D. Bridges.....	Nevada City.....	\$5 00
Second best display of nectarines.....	A. A. Valentine.....	Nevada City.....	\$3 00
Best display of plums.....	J. R. Nickerson.....	Auburn.....	\$6 00
Second best display of plums.....	J. M. Hales.....	Grass Valley.....	\$5 00
Best display of figs.....	J. R. Balch.....	R'h and Ready.....	\$5 00
Second best display of figs.....	J. H. Nile.....	R'h and Ready.....	\$3 00
Best display of table grapes.....	J. H. Nile.....	R'h and Ready.....	\$15 00
Second best display of table grapes.....	John Cable.....	Nevada City.....	\$3 00
Best display of wine grapes.....	J. H. Nile.....	R'h and Ready.....	\$15 00
Best display of blackberries.....	Mrs. W. Arnhart.....	Nevada City.....	\$3 00

SIXTH DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS II.			
Best ten pounds of dried apples.....	S. N. Stranahan...	Nevada City.....	Dip.,\$3 00
Second best ten pounds of dried apples...	Mrs. E. D. Bridges	Nevada City.....	\$2 00
Best ten pounds of dried pears.....	S. N. Stranahan...	Nevada City.....	Dip.,\$3 00
Second best ten pounds of dried pears...	Mrs. E. D. Bridges.	Nevada City.....	\$2 00
Best ten pounds of dried peaches.....	Mrs. F. G. Beatty...	Nevada City.....	Dip.,\$3 00
Second best ten pounds of dried peaches...	S. N. Stranahan...	Nevada City.....	\$2 00
Best ten pounds of dried plums.....	S. N. Stranahan...	Nevada City.....	Dip.,\$3 00
Second best ten pounds of dried plums...	Mrs. E. D. Bridges.	Nevada City.....	\$2 00
Best ten pounds of dried nectarines.....	Mrs. E. D. Bridges.	Nevada City.....	Dip.,\$3 00
Second best ten pounds of dried nectarines...	S. N. Stranahan...	Nevada City.....	\$2 00
Best ten pounds of dried figs.....	Mrs. E. D. Bridges.	Nevada City.....	Dip.,\$3 00
Best ten pounds of dried prunes.....	S. N. Stranahan...	Nevada City.....	Dip.,\$3 00
Second best ten pounds of dried prunes...	Mrs. E. D. Bridges.	Nevada City.....	\$2 00
Best ten pounds of dried blackberries.....	Mrs. E. D. Bridges.	Nevada City.....	Dip.,\$3 00
Second best ten pounds of dried blackberries.....	S. N. Stranahan...	Nevada City.....	\$2 00
Best display of dried fruits.....	S. N. Stranahan...	Nevada City.....	\$10 00
Best display of raisins.....	S. N. Stranahan...	Nevada City.....	\$10 00
CLASS III.			
Best exhibit of English walnuts.....	Mrs. E. D. Bridges.	Nevada City.....	\$7 50
Best exhibit of softshell almonds.....	F. Morrell.....	R'h and Ready...	\$2 50
Best exhibit of chestnuts.....	Mrs. E. D. Bridges.	Nevada City.....	\$2 50
Best exhibit of California walnuts.....	D. I. W. Hays, Jr..	Grass Valley.....	\$1 50
CLASS IV.			
Best display of preserves.....	Mrs. C. Barker.....	Grass Valley.....	Dip.,\$3 00
Best display of pickles.....	Mrs. F. G. Beatty...	Nevada City.....	Dip.,\$3 00
Best display of jellies.....	Mrs. Geo. F. Jacobs	Nevada City.....	Dip.,\$3 00
Best display of hermetically sealed fruits.	Mrs. C. Barker.....	Grass Valley.....	Dip.,\$5 00
CLASS V.			
Best half dozen of claret wine.....	A. Isoard.....	Nevada City.....	Dip.,\$3 00
Best half dozen of port wine.....	A. Isoard.....	Nevada City.....	Dip.,\$5 00
Best half dozen of sherry wine.....	I. J. Rolfe.....	Nevada City.....	Dip.,\$5 00

SEVENTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I—PAINTINGS.			
Best oil painting—still life.....	W. J. Straight.....	Grass Valley.....	\$10 00
Second best oil painting—landscape.....	J. H. Bryant.....	Nevada City.....	\$5 00
Best water color painting.....	Henry Hartung.....	Nevada City.....	\$5 00
Best water color on bolting cloth.....	Mrs. E. M. Preston.	Nevada City.....	\$2 50
Best collection of oil paintings.....	Mrs. J. H. Smitham	Grass Valley.....	\$5 00
CLASS II.			
Best pastel.....	Miss Luvia Ott....	Nevada City.....	\$5 00
Best crayon—one color.....	Miss M. Bradley...	Nevada City.....	\$2 00
Best pencil drawing.....	Miss Cora Sutton...	Nevada City.....	\$2 00
Best india ink drawing.....	A. Ertz.....	Nevada City.....	\$2 00
SPECIAL.			
Oil painting—paper of roses.....	Mrs. J. H. Smitham	Grass Valley.....	Diploma.
Oil painting on bolting cloth.....	Mrs. J. H. Smitham	Grass Valley.....	Diploma.
Painting on porcelain.....	Mrs. J. B. Shaw...	Nevada City.....	Diploma.
Oil painting—Pharaoh's horses.....	Mrs. J. H. Smitham	Grass Valley.....	Diploma.
Crayon drawing.....	Miss Anna Von Schmittberg.....	Nevada City.....	Diploma.

SPEED PROGRAMME.

TUESDAY, AUGUST 28, 1888.

RACE No. 1—RUNNING.

Open to all. Twenty-five dollars entrance; ten dollars forfeit; one hundred and fifty dollars added; second horse, fifty dollars; third, twenty-five dollars. Three-quarter mile heats; best two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Peregrine, s. c., by Joe Hooker; dam, Irene Harding	W. M. Murry	Sacramento.
Blue Bonnet, ch. m., by Joe Hooker; dam, Kate Carson	G. W. Trahern	Sacramento.
Avondale, b. m., by Marmaduke; dam, Pirouette	A. Y. Stevenson	Ione.
Leap Year, b. m., by Norfolk; dam, Lady Jane	L. A. Blasingame	Fresno.
Jack Brady, b. s., by Wildidle; dam, Sour Grapes	W. L. Davis	Stockton.

SUMMARY.

Blue Bonnet	1 1
Jack Brady	2 2
Avondale	3 3

Time—1:17; 1:16½.

RACE No. 2—TROTTING.

For named horses. Purse, three hundred dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Beatrice, b. m., by Sterling; dam, unknown	C. F. Taylor	Nevada City.
General Hamilton, b. s., by Tilton Almont; dam, Cricket	A. D. West	Grass Valley.
Bluebell, blk. m., by Prompter; dam, Belle	Stanley Eddy	Nevada City.
Alpha, br. s., by Privateer; dam, Fawn	W. Gardner	Sacramento.

SUMMARY.

Beatrice	2 1 3 2 1 1
Alpha	3 2 1 1 3 2
Bluebell	1 3 2 3 2 3

Time—2:41½; 2:38½; 2:40½; 2:39½; 2:40; 2:39.

WEDNESDAY, AUGUST 29, 1888.

RACE No. 4—RUNNING.

Open to all. Fifty dollars entrance; twenty-five dollars forfeit; three hundred dollars added. One mile heats; best two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Dave Douglas, b. g., by Leinster; dam, Lily Simpson	G. W. Trahern	Sacramento.
Hermes, b. s., by Bayswater; dam, Herclaide	L. A. Blasingame	Fresno.
Jack Brady, b. s., by Wildidle; dam, Sour Grapes.	W. L. Davis	Stockton.
Sir Thad, b. g., by Thad Stevens; dam, Lady Amanda	Pat. Riley	Grass Valley.
Index, b. g., by Thad Stevens; dam, Gypsy	William Boots	Milpitas.

SUMMARY.

Dave Douglas	1	1
Index	2	2
Hermes	3	3

Time—1:43½; 1:43¾.

RACE No. 5—RUNNING.

For two-year olds. Open to all. Twenty-five dollars entrance; ten dollars forfeit. Five eighths of a mile.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Bessie Shannon, b. f., by Shannon; dam, Betty Bishop	John Reavey & Co.	San Francisco.
Almont, b. c., by Three Cheers; dam, Question.	W. M. Murry	Sacramento.
G W, b. g., by Kyrle Daly; dam, by Thad Stevens.	G. W. Trahern	Sacramento.

Walkover for G W.

THURSDAY, AUGUST 30, 1888.

RACE No. 7—RUNNING.

For district horses. Twenty-five dollars entrance; ten dollars forfeit; one hundred dollars added. One half mile heats; best two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Gray Guest, g. g., by Geo. Miller; dam, by Belmont	Wm. La Due	Roseville.
Sir Thad, b. g., by Thad Stevens; dam, Lady Amanda	Pat. Riley	Grass Valley.
Nick of the Woods, s. s., by Leinster; dam, Lillie Sophie	A. D. West	Grass Valley.
Billy the Kid, b. g., by Leinster; dam, Lily Simpson	A. D. West	Grass Valley.

SUMMARY.

Sir Thad	1	1
Gray Guest	2	2

Time—0:50½; 0:51.

SPECIAL TROTTING.

Purse, one hundred and twenty-five dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Fred, s. g., by Nelson; dam, unknown	A. Morgan	Grass Valley.
Maggie O, b. m., by Doncaster; dam, by Mc-Cracken	C. R. Clarke	Nevada City.
Sidney J, b. g., by Revolution; dam, by Mc-Cracken	G. F. Jacobs	Nevada City.
Nellie S, b. m., by Kilrush; dam, by Belmont ..	A. D. West	Grass Valley.

SUMMARY.

Sidney J	1
Nellie S	dis.
Fred	dis.

Time—2:52.

SPECIAL PACING.

Purse, one hundred and twenty dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Solitaire, b. m., by Singleton; dam, unknown ..	C. H. Burton	Sacramento.
Little Doc, b. g.	T. Seguin	Ione.
Wing Wing, b. m., by Privateer; dam, Lady Lightfoot	Bud Harlan	Winters.

SUMMARY.

Little Doc	1	1	1
Solitaire	2	2	2
Wing Wing	3	3	dis.

Time—2:41; 2:37½; 2:36.

FRIDAY, AUGUST 31, 1888.

RACE No. 10—RUNNING.

Open to all. Fifty dollars entrance; twenty-five dollars forfeit. Two hundred and fifty dollars added. One and one half miles.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Haidee, b. m., by King Alfonso; dam, Inverness	G. W. Trahern	Sacramento.
Menlo, br. g., by Guy Prince; dam, Hattie Hawthorne	E. Flitner	Ione.
Susie S, s. m., by Marmaduke; dam, Pirouette ..	A. Y. Stephenson	Boise City.
Leap Year, b. m., by Norfolk; dam, Lady Jane ..	L. A. Blasingame	Fresno.
Index, b. g., by Thad Stevens; dam, Gypsy	Wm. Boots	Milpitas.

SUMMARY.

Haidee	1
Index	2
Susie S	3

Time—2:39.

RACE NO. 11—RUNNING.

Open to all. Twenty-five dollars entrance; ten dollars forfeit. One hundred and fifty dollars added. Five eighths mile heats; best two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Peregrine, s. c., by Joe Hooker; dam, Irene Harding.....	W. M. Murry	Sacramento.
J M R, s. s., by imp. Kelpie; dam, by Joe Daniels	Jas. Woodburn	Sacramento.
Blue Bonnet, ch. m., by Joe Hooker; dam, Kate Carson	G. W. Trahern	Sacramento.
Minnie R, by Scamperdown; dam, Sally Blair	E. Flitner	Ione.
Pickpocket, c. h., by Joe Daniels; dam, by Specter	Robt. Monroe	Oakdale.
Painkiller, b. s., by Joe Hooker; dam, Betsey Maguire	H. E. Burton	Ione.
Minnie B, b. m., by Leinster; dam, unknown ..	H. E. Burton	Ione.

SUMMARY.

Painkiller	1	1
Blue Bonnet	2	2

Time—1:03½; 1:03¼.

SPECIAL TROTTING RACE.

Purse, two hundred dollars. No entrance. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Gen. Hamilton, b. s., by Tilton Almont; dam, Cricket	A. D. West	Grass Valley.
Pasha, b. s., by Echo; dam, by Belmont	C. F. Taylor	Nevada City.
Bedford, blk. g., by Altamont; dam, unknown ..	S. A. Eddy	Nevada City.
Alpha, br. s., by Privateer; dam, Fawn	W. Gardner	Sacramento.

SUMMARY.

Pasha	1	2	2	1	1
Bedford	2	1	1	2	2
Alpha	3	3			dr.

Time—2:37½; 2:35; 2:33½; 2:33½; 2:34½.

SPECIAL TROTTING RACE.

Purse, one hundred and twenty-five dollars. No entrance. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Senator Bones, b. g., by Patchen; dam, by Belmont	Dan. Morgan	Grass Valley.
Geo. Washington, b. g., by Nephew; dam, Gilroy Belle	R. C. Sargent	Sacramento.
Dandy Jim, b. g., by unknown	W. Gardner	Sacramento.
Lady Washington, b. m., by Nephew; dam, by State of Maine	W. Ober	Sacramento.
Puzzle, s. g., by Kilrush; dam, by Belmont ..	W. La Due	Roseville.

SUMMARY.

Dandy Jim.....	2	1	1	1
Lady Washington.....	1	3	2	2
Senator Bones.....	5	2	3	3
Geo. Washington.....	3	5	5	5
Puzzle.....	4	4	4	4

Time—2:59½; 2:52; 2:54; 2:55.

LADIES' TOURNAMENT.

Purse, thirty-five dollars. First prize, twenty dollars; second prize, ten dollars; third prize, five dollars.

Name.	P. O. Address.
Miss Flora Wheeler.....	Nevada City.
Mrs. M. L. Breed.....	Nevada City.
Miss Mary Miller.....	Grass Valley.

SUMMARY.

Miss Mary Miller.....	First Prize.
Miss Flora Wheeler.....	Second Prize
Mrs. M. L. Breed.....	Third Prize

SATURDAY, SEPTEMBER 1, 1888.

SADDLE RACE.

Purse, twenty-five dollars. No entrance. One half mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Flora B, b. m.....	B. A. Penhall.....	Grass Valley.
Dolly G, b. m.....	A. J. Graham.....	Nevada City.

SUMMARY.

Flora B.....	1	2	1
Dolly G.....	2	1	2

RACE NO. 14—RUNNING.

District horses. Twenty-five dollars entrance; ten dollars forfeit; one hundred dollars added. Five eighths of a mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Sir Thad, b. g., by Thad Stevens; dam, Lady Amanda.....	Pat. Riley.....	Grass Valley.
Nick of the Woods, s. s., by Leinster; dam, Lillie Sophie.....	John Irving.....	Grass Valley.
Gray Guest, g. g., by Gen. Miller; dam, by Belmont	William La Due.....	Roseville.

SUMMARY.

Sir Thad.....	1
Gray Guest.....	2

Time—1:06½.

RACE NO. 15—RUNNING.

Open to all. Fifty dollars entrance; twenty-five dollars forfeit; three hundred dollars added. One mile heats; best two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Dave Douglas, b. g., by Leinster; dam, Lily Simpson.....	G. W. Trahern	Sacramento.
Susie S, s. m., by Marmaduke; dam, Pirouette..	A. Y. Stevenson	Boise City.
Jack Brady, b. s., by Wildidle; dam, Sour Grapes	W. S. Davis	Stockton.
Sir Thad, b. g., by Thad Stevens; dam, Lady Amanda.....	Pat. Riley	Grass Valley.
Index, b. g., by Thad Stevens; dam, Gypsy	William Boots	Milpitas.
Hermes, b. g., by Bayswater; dam, Herclaide ..	L. A. Blasingame	Fresno.

SUMMARY.

Dave Douglas	3 1
Susie S	1 2
Hermes	2 *

Time—1:44; 1:45.

* Disqualified for foul riding.

RACE NO. 16—TROTTING.

2:27 Class. Open to all. Purse, five hundred dollars. One mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Barbaro, g. s., by Len Rose; dam, Barbara.....	Owen Bros.	Fresno.
Emma Temple, b. m., by Jackson Temple; dam, by Emigrant.....	H. H. Helman	Fresno.
Victor, br. s., by Echo; dam, by Woodburn	G. A. Doherty	Crescent Mills.

SUMMARY.

Victor	2 1
Emma Temple	1 dis.
Barbaro	3 dis.

Time—2:28 $\frac{3}{4}$; 2:25.

SPECIAL TROTTING AND PACING RACE.

Purse, one hundred and twenty dollars, without entrance. Little Doc and Johnny Hayward to cart. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Bluebell, blk. m., by Prompter; dam, Belle.....	S. A. Eddy	Nevada City.
Solitaire, blk. m., by Singleton; dam, unknown..	C. H. Burton	Sacramento.
Little Doc, b. g.; pedigree unknown	F. Seguin	Ione.
Johnny Hayward, g. g., by Poscora; dam by G. Messenger	M. Hugh	Fresno.

SUMMARY.

Bluebell	1 1 4 1
Little Doc	4 4 1 3
Johnny Hayward	3 3 2 2
Solitaire	2 2 3 4

Time—2:32; 2:39; 2:34; 2:39.

TRANSACTIONS

OF THE

EIGHTEENTH DISTRICT AGRICULTURAL ASSOCIATION

For the Year 1888,

Composed of the Counties of Inyo, Mono, and Alpine.

OFFICERS OF THE ASSOCIATION.

A. R. CONKLIN	President.
C. MULHOLLAND.....	Secretary.
O. I. MAIRS	Treasurer.

DIRECTORS.

A. R. CONKLIN	Independence.
NATHAN RHINE	Independence.
W. S. ENOS	Independence.
JOHN SHEPHERD	Independence.
JOHN S. GORMAN	Independence.
HARVEY BOONE.....	Bodie.
WM. WALKER	Olancho.
W. K. MILLER.....	Lone Pine.

REPORT.

NOVEMBER 26, 1888.

To the honorable the State Board of Agriculture:

GENTLEMEN: The Directors of the Eighteenth District Agricultural Association submit this, their report of the transactions of said association, for the year ending this date.

C. MULHOLLAND, Secretary.

RECEIPTS AND EXPENDITURES.

1888.	<i>Receipts.</i>	
September 10—Sale of pool privileges and other privileges.....	\$60 50	
October 22—Gate receipts.....	120 50	
Season tickets.....	117 50	
Race entries.....	290 00	
Subscriptions.....	110 00	
Subscriptions.....	2,767 61	
		<u>\$3,466 11</u>
1888.	<i>Expenditures.</i>	
Premiums on horses of all kinds.....	\$272 50	
Premiums on jacks.....	25 00	
Premiums on mules.....	20 00	
Premiums on cows and calves.....	55 00	
Premiums on goats.....	20 00	
Premiums on hogs.....	10 00	
Premiums on poultry.....	12 50	
Premiums on farm products.....	86 00	
Premiums on farm products.....	122 00	
Premiums on honey and apiary display.....	15 00	
Premiums on bread and cake.....	4 00	
Premiums on fruit of all kinds.....	67 00	
Premiums on wine.....	10 00	
Premiums on fine arts.....	37 50	
Premiums on needlework.....	45 50	
Premiums on ores and minerals.....	32 00	
Premiums on special exhibits.....	6 00	
Racing purses.....	949 00	
Ladies tournament.....	100 00	
Advertising and printing.....	149 75	
Salary of Secretary.....	150 00	
Gatekeepers.....	30 00	
Entry clerks.....	35 00	
Superintendent of pavilion and assistant.....	33 00	
Music.....	200 00	
Lumber.....	121 21	
Blacksmith work.....	10 75	
Carpenter work.....	54 00	
Labor.....	119 50	
Painting pavilion.....	10 00	
Water pipe and plumbing.....	51 00	
Building supplies and sundries.....	412 90	
		<u>\$3,466 11</u>

REPORT.

INDEPENDENCE, INYO COUNTY, November —, 1888.

EDWIN F. SMITH, *Esq.*, *Secretary State Agricultural Association, Sacramento, California.*

DEAR SIR: The second annual fair of Agricultural District No. 18, was held at Independence, beginning September seventeenth, and continued till Saturday, September twenty-second, inclusive.

The exhibits of farm products, fruit, and live stock, particularly horses, showed a very gratifying improvement in quantity and quality over the exhibits made the preceding year. This was due to the greatly increased interest taken this year as compared with the year before. Not only was the interest greater in the vicinity where the fair was held, but it was much more widely extended. The people of the other counties included with Inyo in the district, were much better represented at the fair this year than last. There was also a good representation of people and products from the western portion of the State of Nevada.

At the pavilion accommodation for display of all kinds of farm products, fruits, needlework, minerals, marble, and other articles, was increased at least fifty per cent over the accommodation needed last year, and every inch of space was needed. Our pavilion is a substantial structure, sixty feet long by forty feet wide, and is provided with shelves and tables so as to afford as much space as possible for the display of articles. The building stands in the center of a five-acre park; this is inclosed with a fence seven feet high. The park is well supplied with water, and last spring was planted with shade trees. The building and ground belongs to the association. It is already very evident that the annual fairs of the association will be of great value in educating the people in matters pertaining to farming, fruit production, and stock raising. More interest is taken so far in raising horses than any other kinds of live stock. The country east of the Sierra Nevada Mountains appears to be peculiarly well suited to the horse. The atmosphere is free from fogs and damp; the wild grasses are exceedingly nutritious; springs and streams of pure water abound; there is enough elevation to make the atmosphere bracing and healthful at all seasons, and these are evidently the conditions most favorable to the production of good horses. The horses in this region have remarkable endurance, and do an amount of work that would speedily kill horses raised in less favorable regions. It is very rare to see a horse here having any kind of disease, or even blemish. Horses of twenty years old and upward are quite plentiful, that do not show the least failure of action and endurance. There is not the least extravagance in believing that the region included in the Eighteenth Agricultural District will, before many years, produce running and trotting horses of the very first class. Already we have buggy and carriage horses, saddle horses, and horses of all work that we do not fear to put in competition with any raised elsewhere.

A good deal of attention is given to raising mules. Several first class jacks have been brought into the country recently, and many farmers are

extending the production of mules. The horses and mules of Owens Valley command a premium in the Los Angeles market.

During the past year a good deal has been done in Owens Valley in extending orchards. It is demonstrated that this valley is particularly well suited to apples, pears, peaches, quinces, apricots, nectarines, and prunes. These fruits attain here such size, beauty of color, and delicacy of flavor as is rarely equaled elsewhere.

Experiments have been made that establish the fact that this is one of the best regions on the Pacific Coast for the production of raisins. Wine is produced of such fine flavor and bouquet that wine makers at Los Angeles have bought and taken there quantities of it to mix with their own wines, that were deficient in these qualities. It is now evident that Owens Valley is destined to become a populous and rich region through its suitability to the production of the articles above enumerated. The valley contains three hundred thousand acres of land suitable to farming and fruit raising.

Not one tenth of the land is yet under thorough cultivation, and only a beginning has been made in planting orchards and vineyards. Cereals of all kinds yield good crops, and are of excellent quality. It is the best watered region in California. Streams flow down from the Sierra Mountains at short distances apart, the entire length of the valley. These all abound in trout. Springs of pure water are found all over the valley; some of these flow large streams; one, a few miles north of Independence, has a flow of not less than one thousand inches of water. Owens River, a large and swift flowing stream, runs the entire length of the valley from north to south, and discharges into Owens Lake. This river alone would supply an abundance of water to irrigate the whole valley. Several ditches have already been made that take water from the river; most of these are in the neighborhood of the town of Bishop Creek, near the north end of the valley. Near Independence, the county seat of Inyo, a canal is now in course of construction that will irrigate about thirty thousand acres of land. Most of this tract will be devoted to fruit and raisin production.

Locators of land are now at work preparing ground for planting next spring. Parallel with the canal just described, another was finished on the other side of the river during the summer just past. This will irrigate about nine thousand acres of land. Settlers are now at work building houses and getting land ready for planting.

No other part of California offers such opportunities for men of small capital to get homes. Land that will produce the best of fruit, and excellent crops of all other products, can be bought for \$20 to \$25 per acre; this includes perpetual water right. The climate is among the best in the world. Farm work is never delayed for an hour by excessive heat in the warmest summers. There is rarely a time when plowing may not be done any winter. The mountains afford an abundance of excellent fuel.

The mining interests of the district are extensive and valuable. One mine, the Union, near Keeler, the present terminus of the Carson and Colorado Railroad, has already produced over thirteen millions of dollars. Cerro Gordo, Darwin, Lookout, Panamint, Lee, Wild Rose, Coso, these are all mining camps in the south end of Inyo County. These camps, and others in the north end of the county, and all of western Nevada make a first class market for all kinds of fruit, hay, grain, butter, eggs, beef, bacon, and all other farm products. The home supply is not equal to the demand, consequently farmers get better prices for their produce than rule anywhere else in California. At the date of this report butter sells for 70 cents a roll; eggs, 40 cents a dozen; chickens, \$6 a dozen; potatoes, \$1.50 per hundred pounds; oats, 2 cents a pound; barley, 1 $\frac{3}{4}$ cents a pound; corn, 1 $\frac{3}{4}$ cents a

pound. All other products in like proportion. There has been much talk during the summer of the extension of the Carson and Colorado Railroad from Keeler to Mojave, a distance of about one hundred and twenty miles. This extension will put Owens Valley in communication with Los Angeles. A large influx of population and wealth will be sure to follow. The annual address was delivered during the fair by the President of the association, A. R. Conklin, Esq. He said:

"This paradise is located in the center of a valley which is almost an empire in itself, whose productiveness of soil is unsurpassed by any similar scope of country on the known globe, whose salubrious climate is not equaled, let alone being excelled, whose waters come down to us from the everlasting snows, all contributing to make this a grand country, and one whose future cannot be imagined, much less depicted, by the most fertile brain. You have but to apply the magic wand of industry to your soil and from it will spring forth the harvest of golden grain and the luxuriant and nutritious grasses. Let the brawn and muscle of the miner but tap the rock-ribbed sides of your mountains, and from them will come forth such riches as will pale the Munchausen tales of Aladdin's cave. This is a glorious heritage which has been bequeathed to you people, and see to it that neither petty jealousies nor paltry spite shall cripple you in its developments; neither shall a want of enterprise and progression retard that onward march to greatness, wealth, and happiness which will surely be the reward of this people if they are true to their interest and faithful to themselves. To you and into your hands have been confided this noble charge, and unto your keeping has been consigned the guardianship of this great treasury. See to it that as faithful stewards you will be enabled to render a good account of your trust when you shall be called upon to hand it over to those who are to come after you. Of one thing you may rest assured, that the divine requirement of accountability will be exacted of this people—'That unto whom much is given much will be required.' Then let us all stand united in the one great aim and object, that of the development of the country and the enhancement of the happiness and prosperity of the whole people, irrespective of sections or local interests.

"I regret that I have not the statistical information relating to the counties of Alpine and Mono, which would enable me to make to you an elaborate report regarding their resources, their development, and their advancement during the current year. But we know that the rough and rugged mountains of Alpine, interlaced by the fertile valleys, which set up into her sides, are rich and productive; while her grazing advantages are not excelled by any. That Mono has, and we trust in the near future, will again bequeath to the world, those vast riches of metals, which, in the past, has made her such world renown as a mineral-producing region.

"The wealth of Inyo County, as shown by the last assessment over former years, has been of steady and healthful growth. Her population has greatly increased. This gradual but steady acceleration has been the result of her merits, and goes to show that it has come to stay. No spasmodic additions have been made to her people; but it has come as the legitimate results of the purpose to seek and build up good and prosperous homes, where health may be found, and where wealth, in the near future, as the end of honest toil, will abound. Her wealth has not, neither is it, the outgrowth of inflation, or any result of excitement, or the greed of avariciousness. Within her fertile vales there are over three hundred thousand acres of arable lands. Of these, one hundred and fifty thousand one hundred and forty-nine acres, valued at the sum of \$416,429, are owned, or under cultivation. Upon this vast domain there has been

erected improvements of the value of \$228,315. Our town lots are of the value of \$31,162, and the improvements thereon reach the value of \$90,841. The value of our mining claims, with the improvements, are estimated at \$56,378. Of their productions I am unable to form any estimate, but it is safe to say that the mineral output from this source will exceed \$1,000,000 annually.

"The personal property of the county more than exceeds the value of our lands, being of the enormous sum of \$453,750. Of our money it may be said that there is a great dearth, while there is a poverty of indebtedness as to solvent debts; the Assessor showing only the amount of \$20,692, and of debts secured by mortgages the sum of \$76,312. These aggregate items may be analyzed as follows: There are in the county one thousand five hundred and ninety stands of bees, valued at \$1 99½ each. Last year there were produced seven hundred and two gallons of brandies and other liquors, of the value of \$1 79 per gallon. This production, in a section whose soil and climate is far better and more peculiarly adapted to the growth of the grape than any other section on the coast, shows a great lack of enterprise in this industry. This is certainly a branch of fruit growing which deserves, and will soon receive more, if not a large share of attention. Of bacon there was manufactured five thousand five hundred pounds, valued at 8 cents per pound. Surely this cannot be considered as foreshadowing a strong Bismarckian population in our midst. Our dealers are constantly importing this product into our county, owing to the excessive demand for this product over its production. This is an industry which should be fostered and encouraged. It is remunerative, and attended by but a small outlay.

"Our cows have been quite industrious during the past twelve months, having yielded four thousand two hundred and eighty-nine calves, of the value \$7 99 each. We have produced beef cattle, two hundred and seven in number, worth \$20 a head. Of stock cattle we have seven thousand one hundred and ten, of the assessed value of \$20 each. Our stock of horses has been increased by one thousand two hundred and sixty-two colts. There is no country better adapted to the raising of horses and mules than Inyo County, its high altitude and rarified atmosphere giving them great lung power, and is a great factor in the natural development of the animals. Of bulls and cows we have twenty-two thoroughbreds, of the value of \$98 20 each; and of American cows, eight hundred and ten head, worth \$24 91 each. Of the cereals for the current year, we produced one thousand and eighty centals of wheat, five hundred of oats, six hundred and sixty-five of barley, and one thousand three hundred of corn, each of the value of \$1 25 per cental; hay, three hundred and eight tons, which in all probability is about one tenth of the quantity; hogs, nine thousand six hundred and twenty; honey, six thousand one hundred pounds, worth 10 cents per pound, and a lively demand for it; and yet the Assessor values it at only 4 cents. Of horses, according to the assessment, we have only three thousand one hundred and seventy head. Of sheep, we have five thousand seven hundred, and of goats, three thousand and one head. These, together with various other items, foot up the grand total of \$1,241,189—a goodly showing, indeed; and yet it must be borne in mind that these statements are taken from the Assessor's list, which, it is safe to estimate, does not show more than two thirds, and in many instances not one half of the number or quantity of our productions.

"It is to be regretted that a proper and reliable data is not at hand by which we are enabled to arrive at a correct number and valuation of our numerous products. But meager and unreliable as it is, it is a creditable showing. It exhibits the varied character of our productions and the

inestimable and boundless variety of our resources, and the universal adaptation of our soil to every thing within the range of husbandry. That these productions can be increased, both in quantity and quality, cannot be questioned by any one who will for but one moment consider what we were but a few years ago and what we are now. The country until very lately has been inaccessible to the outside world through the lack of proper communication; and even now, with a railroad at our very doors, we have to go through Nevada to get back into California, in leaving or returning to our homes. It is to be hoped, and in fact it may be set down as an established truth, that it will be but a short space of time before the eastern slope of California will have a direct southern outlet by rail, either through the medium of the narrow gauge system, or by that of the standard. But however that may be, there is every encouragement for our people to press forward in the development of the country. The system of irrigation which has been, and which is about to be inaugurated, will bring under subjection the desert plains, and cause them to become fertile and productive. Happy homes will adorn and beautify the land. Churches and school houses will be built, and there are those now within the sound of my voice who will live to see this valley a busy hive of industrious and thriving people, whose numbers will be reckoned, not by the hundreds, but by the thousands. There is no factor that will contribute more to this end than just such unions as we are holding here to-day. By these the farmer, the merchant, the mechanic, and all other classes are brought into communion one with the other; and by comparison of different ideas, and theories, and systems, all will be benefited, and a just and proper spirit of rivalry and emulation will be begotten, fostered, and bring forth a great good to all, and one which will prove profitable and beneficial to each and every person, whatever his calling or vocation in life may be. Then, fellow citizens, we would endeavor to impress upon you the importance of giving your utmost aid, both by your enterprise and material succor, in building up and maintaining the Eighteenth Agricultural District and its annual exhibitions, so that it will be an honor to the district, a credit to this people, and a means by which you will all be benefited."

At the recent election the vote of Inyo County was 25 per cent greater than the vote cast two years before. All of this increase is due to a corresponding increase of population. The other counties included in the Eighteenth District, viz.: Mono and Alpine, have not gained in the same proportion.

The creation of the Eighteenth District has already been of great value to a hitherto neglected but very extensive and valuable portion of our great State. A continuation of the appropriation in aid of the district will do much to hasten the settlement and improvement of vast areas of excellent land now in a state of nature and without inhabitants. The wealth of the State will be increased by millions of dollars; happy homes, schools, and churches will abound; brave men will be raised up to defend American institutions, and fair and virtuous girls will grow up to be mothers of sons and daughters worthy of such progenitors.

A full report of all the transactions of the Eighteenth District for the year eighteen hundred and eighty-eight is herewith inclosed.

C. MULHOLLAND.

EXHIBITS AT THE FAIR—1888.

FIRST DEPARTMENT.

Name of Animal.	Owner.	Address.
CLASS II—STANDARD TROTTERS.		
Roderick, stallion, three years old or over	Gustav Sanger	Big Pine.
Jessie, mare, three years old or over	Gustav Sanger	Big Pine.
Albenton, stallion, three years old or over	W. S. Enos	Independence.
CLASS III—ROADSTERS.		
Dollie Webster, mare	Wm. Noonan	Lone Pine.
Valentine, stallion	J. S. Gorman	Independence.
Bismarck, stallion	M. Muldoon	Independence.
Bismarck, Jr., stallion	Jacob Vogt	Independence.
Mollie, mare	John Lucas	Lone Pine.
Rachael, mare	John Lucas	Lone Pine.
Johnnie, stallion colt	John Lucas	Lone Pine.
Blaze, stallion colt	John Lucas	Lone Pine.
Bird, mare	Thos. Webb	Independence.
Dust, horse	Thos. Webb	Independence.
Joe, horse	W. S. Enos	Independence.
Dana, horse	W. S. Enos	Independence.
CLASS IV—ALL WORK.		
Lucy F. mare	Wm. Noonan	Lone Pine.
Dollie Webster, mare	Wm. Noonan	Lone Pine.
Milo, horse	Wm. Noonan	Lone Pine.
Baxter, horse	Wm. Noonan	Lone Pine.
Ted, stallion	W. S. Morton	Independence.
Black Prince, stallion	A. R. Conklin	Independence.
Lord Manning, stallion	A. R. Conklin	Independence.
Riley, stallion	Gustav Sanger	Big Pine.
Belle, mare	Gustav Sanger	Big Pine.
Billy, stallion	Gustav Sanger	Big Pine.
Daisy, mare	Gustav Sanger	Big Pine.
Rosie, mare	Finlay Melver	Independence.
Sinder, mare	W. S. Enos	Independence.
Jenny W, mare	W. S. Enos	Independence.
Ginver, mare	W. S. Enos	Independence.
Sinder, mare and colt	W. S. Enos	Independence.
Jenny W, mare and colt	W. S. Enos	Independence.
Family	W. S. Enos	Independence.
Family	W. S. Enos	Independence.
Donald, stallion	W. S. Enos	Independence.
Sullivan, stallion	W. S. Enos	Independence.
CLASS V.		
Prince, stallion	W. S. Morton	Independence.
Fanny, mare	Fred. Schabbell	Independence.
Black Bess, mare	Fred. Schabbell	Independence.
—, stallion colt	Fred. Schabbell	Independence.
Dolly, mare	Gustav Sanger	Big Pine.
Prince, stallion	Crocker Bros.	Big Pine.
Sam, stallion	E. Robinson	Independence.
Lady Clyde, mare	W. S. Enos	Independence.
Clyde, mare	W. S. Enos	Independence.
Family of three	W. S. Enos	Independence.
Team of two	W. S. Enos	Independence.
CLASS VII—SADDLE HORSES.		
Pinto, gelding	J. R. Moffett	Lone Pine.
Billy, gelding	J. R. Moffett	Lone Pine.

FIRST DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
Cleveland, gelding	Nettie Olds	Round Valley.
Darby, gelding	I. H. Mulholland	Independence.
CLASS VIII—SWEEPSTAKES.		
Milo, stallion	P. Laborge	Lone Pine.
Lady Clyde, mare	W. S. Enos	Independence.
Albenton, stallion	W. S. Enos	Independence.
Roderick, stallion	Gustav Sanger	Big Pine.
Jesse, stallion	Gustav Sanger	Big Pine.
CLASS IX—JACKS.		
Harry, jack	J. E. Shepherd	Independence.
Grover, jr., jack	J. E. Shepherd	Independence.
Grover, jack	W. S. Enos	Independence.
CLASS X—MULES.		
Lue, mare	J. E. Shepherd	Independence.
Stella, mare	J. E. Shepherd	Independence.
Tom, horse mule	Mrs. Lewis	Independence.
Johnnie, horse mule	Mrs. Lewis	Independence.
CLASS XII—CATTLE.		
Daisy, cow	C. A. Walter	Independence.
Cherry, cow	A. N. Bell	Independence.
Silkie, cow	A. N. Bell	Independence.
Bull	A. N. Bell	Independence.
Family	A. N. Bell	Independence.
CLASS XIV—GOATS.		
Lot of six Angoras	Horace Bellows	Olancho.
CLASS XV—SWINE.		
Lot of five	John Baxter	Independence.
Family	Jacob Vogt	Independence.
Boar	Jacob Vogt	Independence.
CLASS XVI—POULTRY.		
Pair of geese	John Baxter	Independence.
Chickens	Fred. Schabbell	Independence.
Ducks	Arthur Shepherd	Independence.
Turkeys	Fred. Schabbell	Independence.

PREMIUMS AWARDED—1888.

FIRST DEPARTMENT.

Name of Animal.	Exhibitor.	Address.	Award.
CLASS II.			
Stallion	G. Sanger	Big Pine	---\$20 00
CLASS III.			
Stallion	M. Muldoon	Independence	---\$20 00
Stallion	Jacob Vogt	Independence	---\$10 00
Team	Thos. Webb	Independence	---\$10 00
CLASS IV.			
Stallion	A. R. Conklin	Independence	---\$15 00
Stallion	G. Sanger	Big Pine	---\$20 00
Stallion	Wm. Noonan	Lone Pine	---\$10 00
Colt	F. McIver	Independence	---\$10 00
Family	G. Sanger	Big Pine	---\$20 00
CLASS V.			
Stallion	W. S. Enos	Independence	---\$20 00
Stallion	E. Robinson	Independence	---\$15 00
Stallion	W. S. Enos	Independence	---\$7 50
Draft span	W. S. Enos	Independence	---\$10 00
Mare	G. Sanger	Big Pine	---\$10 00
CLASS VI.			
Carriage team	E. Robinson	Independence	---\$10 00
Buggy team	John Lucas	Lone Pine	---\$15 00
CLASS VII.			
Saddle horse	J. R. Moffett	Lone Pine	---\$15 00
Saddle horse	Nettie Olds	Round Valley	---\$10 00
CLASS VIII—SWEEPSTAKES.			
Stallion	G. Sanger	Big Pine	---\$10 00
Mare	G. Sanger	Big Pine	---\$10 00
CLASS IX—JACKS.			
Jack	J. E. Shepherd	Independence	---\$15 00
Jack	W. S. Enos	Independence	---\$10 00
CLASS X—MULES.			
Span of mules	Mrs. Lewis	Independence	---\$10 00
Span of mules	J. E. Shepherd	Independence	---\$10 00
CLASS XII.			
Cow	A. N. Bell	Independence	---\$15 00
Cow	C. A. Walter	Independence	---\$10 00
Cow	A. N. Bell	Independence	---\$20 00
Cow and calf	A. N. Bell	Independence	---\$10 00
CLASS XIV.			
Angora goats	Horace Bellows	Olancha	---\$20 00
CLASS XV.			
Hogs	John Baxter	Independence	---\$10 00
CLASS XVI.			
Chickens	Fred. Schabbell	Independence	---\$5 00
Turkeys	Fred. Schabbell	Independence	---\$5 00
Geese	John Baxter	Independence	---\$2 50

SECOND DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Agricultural products.....	C. A. Walter	Independence.....	\$15 00
Agricultural products.....	John Baxter	Independence.....	\$10 00
Sack of oats	John Baxter	Independence.....	\$5 00
One hundred pounds of flour	A. N. Bell	Independence.....	\$5 00
One hundred pounds of shelled corn	C. A. Walter	Independence.....	\$5 00
Fifty pounds of alfalfa seed	C. A. Walter	Independence.....	\$5 00
Sack of seed wheat.....	W. L. Hunter	Independence.....	\$5 00
Sack of seed rye (special)	W. L. Hunter	Independence.....	\$2 00
Sack of seed barley	Jacob Vogt.....	Independence.....	\$5 00
Fifty pounds early rose potatoes	W. J. Lake	Independence.....	\$2 00
One hundred pounds, any variety	W. J. Lake	Independence.....	\$2 00
Tomatoes	Mrs. Baker	Big Pine	\$2 00
Watermelons	J. W. Symmes	Independence.....	\$2 00
Egg plant (special)	John Kispert.....	Independence.....	\$2 00
Sweet potatoes	C. A. Walter	Independence.....	\$2 00
Beets	C. A. Walter	Independence.....	\$2 00
Peppers	C. A. Walter	Independence.....	\$2 00
White beans	C. A. Walter	Independence.....	\$2 00
Pink beans	C. A. Walter	Independence.....	\$2 00
Garden peas	C. A. Walter	Independence.....	\$2 00
Cantaloupes	C. A. Walter	Independence.....	\$2 00
Squash	Fred. Schabell	Independence.....	\$2 00
Pumpkins	Jacob Vogt	Independence.....	\$2 00
Cabbage	H. L. Clark	Independence.....	\$2 00
Cucumbers	H. L. Clark	Independence.....	\$2 00
Carrots	A. N. Bell	Independence.....	\$2 00
Onions	Mrs. Baker	Big Pine	\$2 00
Celery	S. A. Densmore	Independence.....	\$2 00
Bale of timothy hay	John Shepherd	Independence.....	\$5 00
Bale of alfalfa hay	John Shepherd	Independence.....	\$5 00
Blue grass seed (special)	C. A. Walter	Independence.....	\$2 00
Blue grass seed (special)	John Shepherd	Independence.....	\$2 00
Tobacco (special)	C. A. Walter	Independence.....	\$1 00
CLASS III.			
Butter in roll	John Baxter	Independence.....	\$10 00
Butter in roll	F. J. Reynolds	Independence.....	\$5 00
Butter, pickled	F. J. Reynolds	Independence.....	\$10 00
Lard	Mrs. J. Brown	Independence.....	\$2 50
Best display of jelly	Lena Thomsen	Independence.....	\$7 50
Second best display of jelly	Mrs. J. Brown	Independence.....	\$5 00
Best display of preserves	Lena Thomsen	Independence.....	\$7 50
Second best display of preserves	Alice Stecker	Independence.....	\$5 00
Best display of pickles	Lena Thomsen	Independence.....	\$7 50
Second best display of pickles	Rachael Ball	Independence.....	\$5 00
Cheese	A. Matlick	Bishop Creek	\$10 00
Ham	C. A. Walter	Independence.....	\$5 00
Bacon	Jacob Vogt	Independence.....	\$5 00
Best display of fruit in jars	Mrs. J. Brown	Independence.....	\$10 00
Second best display of fruit in jars	Alice Stecker	Independence.....	\$5 00
Honey	W. M. Rasmussen	Independence.....	\$5 00
Apiary display	W. M. Rasmussen	Independence.....	\$10 00
Bread and cake	H. Levy	Independence.....	\$5 00

THIRD DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASSES I AND II.			
Best display of apples	John Baxter	Independence	\$5 00
Second best	John Kispert	Independence	\$2 50
Best display of pears	J. W. Symmes	Independence	\$5 00
Second best	S. A. Densmore	Independence	\$2 50
Best display of peaches	S. A. Densmore	Independence	\$5 00
Second best	Fanny Baker	Big Pine	\$2 50
Best display of plums	S. A. Densmore	Independence	\$5 00
Second best	E. Robinson	Independence	\$2 50
Best display of quinces	A. A. Densmore	Independence	\$5 00
Best display of prunes	A. A. Densmore	Independence	\$5 00
Best display of nectarines (special)	A. A. Densmore	Independence	\$2 00
Best display of wine grapes	John Kispert	Independence	\$5 00
Best display of raisin grapes	J. W. Symmes	Independence	\$5 00
Best display of dried fruits	C. A. Walter	Independence	\$10 00
Second best	John Baxter	Independence	\$5 00
Display of wine	S. A. Densmore	Independence	\$10 00

SIXTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Best oil painting	Mrs. C. H. Parsons	Round Valley	\$7 50
Second best	Miss Voris	Independence	\$5 00
Crayon drawing	Marcia Stevens	Lone Pine	\$5 00
Painting on satin	Mrs. Parsons	Round Valley	\$2 50
Japanese panels	Marcia Stevens	Lone Pine	\$2 50
Collection of paintings	Miss M. Conklin	Independence	\$5 00
Water color drawing	Mrs. C. H. Parsons	Round Valley	\$5 00

SEVENTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Knitted quilt	Mrs. N. Rhine	Independence	\$2 50
Crazy quilt	Lena Thomsen	Independence	\$2 50
Embroidered dress	Lena Thomsen	Independence	\$2 00
Hearth rug	Lena Thomsen	Independence	\$2 00
Crochet shawl	Mrs. C. Mulholland	Independence	\$2 00
Paper flowers	Lena Thomsen	Independence	\$2 00
Fancy articles	Addie Lewis	Independence	\$5 00
Lady's dress	Lena Thomsen	Independence	\$5 00
Spanish needlework	Mrs. C. Mulholland	Independence	\$5 00
Knitted silk hose	Mrs. J. C. Irwin	Independence	\$2 00
Crewel work	Annie Thomsen	Independence	\$2 00
Patchwork quilt	J. A. Hannah	Independence	\$2 50
Toilet set	Mrs. A. W. Eibe- shutz	Independence	\$2 00
Sofa cushion	J. A. Hannah	Independence	\$2 00
Tidy	Addie Lewis	Independence	\$2 00
Table scarf and cover	Mrs. N. Rhine	Independence	\$2 00
Child's dress	Cora Craig	Independence	\$2 00
Child's splasher	Maud Russell	Independence	\$2 00

EIGHTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I.			
Collection of ores.....	W. L. Hunter	Independence.....	---\$15 00
Collection of coins	Jessie Skinner.....	Independence.....	---\$2 00
Silver ores	W. H. Russell.....	Benton.....	---\$5 00
Display of marble.....	Al. Standing.....	Keeler	---\$10 00
Old lace.....	Rachel Bell	Independence.....	---\$2 00
Eggs and curios.....	Maggie S. Conklin.....	Independence.....	---\$2 00
Alum work	Mrs. Goodall.....	Big Pine	---\$2 00

SPEED PROGRAMME.

TUESDAY, SEPTEMBER 18, 1888.

RACE NO. 1—TROTTING.

Two-year olds. Purse, one hundred dollars. Mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Sam, s. h., by Bismarck; dam, Honita	Alvah Conklin	Independence.
Dolly Webster, b. m., unknown	William Noonan	Lone Pine.
Milo, g. h., unknown	P. La Berge	Lone Pine.

SUMMARY.

Sam	1
Milo	2
Dolly Webster	3

Time—3:25.

RACE NO. 2—HALF MILE DASH.

Untried horses. Purse, fifty dollars.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Brown Belle, br. m., unknown	Ed. Rope	Independence.
Bay Jack, b. g., unknown	J. M. Horton	Bishop Creek.
Clipper, b. g., unknown	J. W. P. Laird	Independence.
Jesse James, unknown	Asa Smith	Bishop Creek.

SUMMARY.

Brown Belle	1
Jesse James	2
Bay Jack	3
Clipper	4

Time—0:53 $\frac{1}{4}$.

WEDNESDAY, SEPTEMBER 19, 1888.

RACE NO. 3—TROTTING—TEAMS.

Teams trotting to wagon. Purse, one hundred dollars. Mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Theo and mate, unknown	P. La Berge	Lone Pine.
Ned and Pete, unknown	Frank Williams	Bishop Creek.
George and Tom, unknown	Alvah Conklin	Independence.

TRANSACTIONS OF THE

SUMMARY.

Theo and mate.....	1
George and Tom	dis.
Ned and Pete	dis.

Time—3:10.

RACE NO. 4—RUNNING.

Free for all. Purse, one hundred dollars. One half mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Billy S, g. g., unknown.....	Frank Williams.....	Bishop Creek.
Brown Belle, br. m., unknown	J. M. Horton.....	Bishop Creek.
Bismarck, br. g., unknown	Gustav Sanger	Big Pine.

SUMMARY.

Billy S	1
Brown Belle	2
Bismarck	3

Time—0:52.

THURSDAY, SEPTEMBER 20, 1888.

RACE NO. 5—TROTTING.

Stallions only. Purse, one hundred dollars. Mile heats.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Ned, blk. s., unknown.....	David Olds.....	Round Valley.
Ted, g. s., unknown	W. S. Morton.....	Independence.
Lord Manning, by Planter	John Keegan.....	Independence.

SUMMARY.

Ned	1
Ted	2
Lord Manning.....	3

Time—3:37.

RACE NO. 6—RUNNING.

Free for all. Saddle horses. Purse, fifty dollars. One half mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Little Maud, unknown.....	John Parriph	Lone Pine.
Bird, blk. m., unknown	Frank Williams.....	Bishop Creek.
Sandy, b. g., unknown	J. M. Horton.....	Bishop Creek.

SUMMARY.

Sandy.....	1
Bird.....	2
Little Maud	3

Time—0:55.

RACE No. 7—RUNNING.

Free for all. Purse, fifty dollars. One quarter mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Dandy Pat, br. g., unknown	C. Burns	Kernville.
Brown Belle	J. M. Horton	Bishop Creek.
Billy S, br. g.	Frank Williams	Bishop Creek.

SUMMARY.

Dandy Pat	1
Billy S	2
Brown Belle	3

Time—0:24 $\frac{1}{2}$.

FRIDAY, SEPTEMBER 21, 1888.

RACE No. 8—TROTTING.

Free for all. Purse, one hundred dollars. One mile; best two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Ned, blk. s., unknown	Frank Williams	Bishop Creek.
Tom, br. g., unknown	I. H. Mulholland	Independence.
Pete, s. g., unknown	J. Harley	Round Valley.

SUMMARY.

Ned	1
Tom	2
Pete	dis.

Time—3:10.

RACE No. 9—RUNNING.

Free for all. Purse, one hundred dollars. Mile heats; best two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Sidewinder, b. g.	Gustav Sanger	Big Pine.
Emma T, b. m.	J. Trullinger	Independence.
Darby, br. g.	I. H. Mulholland	Independence.

SUMMARY.

Sidewinder	1
Darby	2
Emma T	3

Time—2:02.

SATURDAY, SEPTEMBER 22, 1888.

RACE No. 10—RUNNING.

For beaten horses only. One half mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Bird	Frank Williams	Bishop Creek.
Jesse James	Marshall Naylor	Big Pine.
Emma T	J. Trullinger	Independence.

SUMMARY.

Jesse James	1
Bird	2
Emma T	3

Time—0:56.

RACE No. 11—TROTTING.

For three-year olds. Purse, one hundred dollars. Mile heats; best two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Biddy Muldoon, b. m., by Bismarck	J. M. Horton	Bishop Creek.
Business, b. g., by Bismarck	E. Robinson	Independence.
Valentine, b. s., by Bismarck	J. C. Irwin	Independence.

SUMMARY.

Biddy Muldoon	1
Valentine	2
Business	3

Time—3:49.

RACE No. 12—RUNNING.

Free for all. Purse, fifty dollars. Three fourths of a mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Sandy, s. g.	Ed. Rose	Independence.
Bird	Frank Williams	Bishop Creek.
Brown Belle	J. M. Horton	Bishop Creek.

SUMMARY.

Bird	1
Sandy	2
Brown Belle	3

Time—1:24½.

TRANSACTIONS

OF THE

NINETEENTH DISTRICT AGRICULTURAL ASSOCIATION

For the Year 1888,

Composed of the County of Santa Barbara.

OFFICERS OF THE ASSOCIATION.

CHAS. P. LOW	President.
HENRY B. BRASTOW	Secretary.
A. L. LINCOLN	Treasurer.

DIRECTORS.

CHAS. P. LOW	Santa Barbara.
G. C. PACKARD	Santa Barbara.
W. B. JAMES	Santa Barbara.
E. C. ROEDER	Santa Barbara.
J. C. HAMER	Santa Barbara.
T. C. NANCE	Santa Maria.
F. M. SENTENNY	Carpenteria.
R. MACHIM	Lompoc.

REPORT.

SANTA BARBARA, December 1, 1888.

To the honorable the State Board of Agriculture:

GENTLEMEN: The Directors of the Nineteenth District Agricultural Association submit this, their report of the transactions of said association, for the year ending this date.

HENRY B. BRASTOW, Secretary.

RECEIPTS AND EXPENDITURES.

1888.	<i>Receipts.</i>	
December 1—	To received from sale of tickets.....	\$1,868 50
	To received from sale of privileges.....	183 00
	To received from race entries.....	630 00
	To received from advertisements in premium list pamphlet.....	230 00
	To received from sale of fruit.....	60
	To State warrant.....	1,500 00
		<u>\$4,412 10</u>
1888.	<i>Expenditures.</i>	
December 1—	By balance from account of 1887.....	\$2 05
	By paid cash premiums.....	645 50
	By paid race purses.....	1,694 00
	By paid premiums lady riders.....	30 00
	By paid for music, day and evening.....	318 00
	By paid Ezra Cook, supplies.....	13 85
	By paid Sanborn & Judge, stationery.....	10 30
	By paid Wells, Fargo & Co., express charges.....	10 85
	By paid Noble & Hitchcock, ribbons.....	6 40
	By paid Independent Publishing Co., printing.....	100 00
	By paid Independent Publishing Co., advertising.....	53 00
	By paid Press Publishing Co., advertising.....	60 50
	By paid Herald, advertising.....	10 00
	By paid E. H. Heacock, ticket clerk.....	20 00
	By paid B. M. Smith, assistant ticket clerk.....	12 50
	By paid O. B. Farnum, entry clerk.....	24 00
	By paid G. P. Penfield, labor.....	2 50
	By paid C. S. Shotwell, carting.....	1 00
	By paid John Walton, labor.....	10 00
	By paid F. T. Rowan, nightwatch, pavilion.....	15 00
	By paid C. Kelton, nightwatch, pavilion.....	6 00
	By paid F. Walker, labor.....	27 00
	By paid F. Packard, assistant superintendent of pavilion.....	27 00
	By paid Jas. Morgan, gatekeeper, pavilion.....	16 00
	By paid J. M. Garrettson, gatekeeper, track.....	20 00
	By paid Thos. Martin, gatekeeper, track.....	16 00
	By paid R. Dugan, nightwatch, yard.....	6 00
	By paid T. H. Rasor, nightwatch, yard.....	15 00
	By paid Chas. P. Low, straw.....	30 00
	By paid T. B. Curly, carting.....	1 00
	By paid W. C. Show, oil.....	1 40
	By paid Edwards & Boeseke, supplies.....	10 75
	By paid Jas. Delaney, carting lumber.....	14 00

December 1—By paid Electric Light Co.....	\$30 00	
By paid Alex. Yates, labor, stock yard.....	15 00	
By paid Mrs. M. F. Hamer, badges and decorating..	8 25	
By paid W. J. Stafford, posting bills.....	6 00	
By paid T. J. Burdick, carpenter work.....	27 68	
By paid Roeder & Ott, waterpipe and laying, and gasoline.....	50 35	
By paid F. T. Knight, use of three hundred chairs..	30 00	
By paid Garland & Son, cloth.....	5 08	
By paid E. C. Roeder, freight.....	7 35	
By paid E. B. Chambers, silver cups.....	36 50	
By paid F. A. Conant, engraving.....	13 20	
By paid T. & A. Goux, supplies.....	24 50	
By paid F. A. Malone, judge of races.....	75 00	
By paid A. O. Perkins, notary fees.....	2 00	
By paid Gorham & Co., lumber.....	3 62	
By paid Chas. P. Low, services.....	25 00	
By paid E. C. Roeder, services.....	25 00	
By paid T. C. Hamer, services.....	25 00	
By paid T. C. Nance, services.....	25 12	
By paid R. Matchim, services.....	25 13	
By paid F. M. Sentenney, services.....	25 25	
By paid G. C. Packard, services.....	25 00	
By paid H. B. Brastow, Secretary, salary, 1888.....	150 00	
By paid Santa Barbara Land, Building, and Improvement Co., rent of pavilion and fair grounds.....	300 00	
By paid discount of State warrant.....	18 75	
By balance cash on hand.....	203 72	
		\$4,412 10

EXHIBITS AT THE FAIR—1888.

FIRST DEPARTMENT.

Name of Animal.	Owner.	Address.
CLASS I—THOROUGHBRED HORSES.		
Langtry, colt	O. M. Covarrubias	Santa Barbara.
Nannie, mare	T. M. Lewis	Santa Barbara.
Accident, stallion	G. W. Leland	Santa Barbara.
Consuello	E. R. Den	Santa Barbara.
Othello, stallion	E. R. Den	Santa Barbara.
Laura, filly	E. R. Den	Santa Barbara.
Herodius, stallion	T. P. Williams	Los Alamos.
CLASS II—ROADSTERS.		
Jessie, mare	Wm. Robinson	Santa Barbara.
Cashmir, stallion	J. N. Johnson	Santa Barbara.
Victoria, mare	J. N. Johnson	Santa Barbara.
Nelly S, mare	G. C. Welsh	Santa Barbara.
Molly W, filly	G. C. Welsh	Santa Barbara.
Daisy, filly	T. M. Lewis	Goleta.
Dandy, colt	T. M. Lewis	Goleta.
—, colt	J. W. Cooper	Santa Barbara.
Agnes and Perica, pair of horses	O. M. Covarrubias	Santa Barbara.
Toby, horse colt	O. M. Covarrubias	Santa Barbara.
Hesperion, stallion	F. T. Underhill	Los Alamos.
Saxton, stallion	F. T. Underhill	Los Alamos.
Electro, stallion	Merritt & Murray	Santa Maria.
Allen G, colt	D. F. Oglesby	Santa Maria.
Hesp, colt	T. Leslie	Santa Maria.
Jennie, mare	T. M. Lewis	Goleta.
Three colts	W. W. Hollister	Santa Barbara.
Mollie, mare	W. W. Hollister	Santa Barbara.
Bess, mare	W. W. Hollister	Santa Barbara.
Rosie, mare	W. W. Hollister	Santa Barbara.
McCarty, mare	F. J. Brookshire	Santa Maria.
Glenco, horse	F. J. Brookshire	Santa Maria.
Dexter, stallion	A. J. Gillett	Lompoc.
Garfield, colt	F. Rodriguez	Santa Barbara.
Nellie, mare	D. Carter	Santa Barbara.
Billy, colt	D. Carter	Santa Barbara.
Carrie B, mare	E. R. Den	Santa Barbara.
O M C, colt	E. R. Den	Santa Barbara.
Dashwood, stallion	E. A. Hollister	Goleta.
Queen, mare	Geo. Buck	Goleta.
Dan Rice, stallion	J. G. Doty	Dos Pueblos.
Mollie D, mare	J. G. Doty	Dos Pueblos.
Dan Rice and five colts	J. G. Doty	Dos Pueblos.
Kittie Wade, filly	J. Archer	Santa Barbara.
Florence P, mare	H. W. Lawrence	Santa Barbara.
Dixie, horse	H. W. Lawrence	Santa Barbara.
Fox, colt	A. Martin	Carpenteria.
George W, stallion	A. C. J. Wilson	Santa Barbara.
Lulu M, mare	A. C. J. Wilson	Santa Barbara.
Donna Day, mare	A. C. J. Wilson	Santa Barbara.
Maggie W, colt	A. C. J. Wilson	Santa Barbara.
Mary, colt	E. Doty	Naples.
Sorrel Tom, horse	E. R. Den	Santa Barbara.
Blaine, stallion	M. F. Burke	Santa Barbara.
—, pair horses	Samuel Robinson	Santa Barbara.

TRANSACTIONS OF THE
FIRST DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
CLASS III—DRAFT HORSES.		
Charlie, stallion	T. Phillips	Goleta.
Chromo, stallion	T. Phillips	Goleta.
Prince, stallion	T. Phillips	Goleta.
Stonewall, stallion	T. Phillips	Goleta.
Lester and George, two colts	T. Phillips	Goleta.
Morcena, mare	T. Phillips	Goleta.
Infelice, mare	T. Phillips	Goleta.
Flora and Emma, two colts	T. Phillips	Goleta.
Polly K, filly	C. H. Kelton	Santa Barbara.
Fannie, filly	W. E. Johnson	Santa Barbara.
Monte, stallion	Jno. Pyster	Carpenteria.
Aledo, stallion	Jno. Pyster	Carpenteria.
Dolly, mare	A. H. Phillips	Goleta.
Delesiss, Jr., colt	E. S. Cordero	Las Cruces.
Moscow, mare	F. M. Sentenney	Carpenteria.
CLASS III—DRAFT HORSES.		
Lottie, filly	F. M. Sentenney	Carpenteria.
El Titus, colt	F. M. Sentenney	Carpenteria.
Maggie, mare	E. P. Sawyer	Carpenteria.
Fanny, mare	Jno. Donahue	Santa Ynez.
Kitty, colt	Jno. Donahue	Santa Ynez.
Fred, horse	E. Doty	Naples.
Mollie, mare	E. Doty	Naples.
Lucy, colt	E. Doty	Naples.
Pellegree, colt	R. Romero	Santa Barbara.
Charlie, colt	James Ward	Carpenteria.
El Kadir, stallion	T. Phillips	Goleta.
Pet, colt	A. B. Sutton	Carpenteria.
El Kadir, stallion and five colts	T. Phillips	Goleta.
CLASS IV—CARRIAGE HORSES.		
Tom, horse	William Robinson	Santa Barbara.
Pair of gray mares	G. C. Welsh	Santa Barbara.
Pair of sorrel horses	B. Baker	Lompoc.
Pair of cream horses	Samuel Robinson	Santa Barbara.
Celum, horse	E. Doty	Naples.
Sally and Bell, pair of mares	E. Doty	Naples.
Charlie, horse	E. A. Hollister	Goleta.
Philip, horse	George Buck	Goleta.
Dotty, mare	A. W. Buell	Santa Barbara.
Dake, horse	W. E. Johnson	Santa Barbara.
CLASS V—HORSES FOR ALL PURPOSES.		
Pat, stallion	A. W. Buell	Santa Barbara.
Polly, mare	A. W. Buell	Santa Barbara.
Don Patricio, stallion	I. K. Fisher	Santa Barbara.
Kate, mare	A. H. Phillips	Goleta.
Ben Wade, colt	A. H. Phillips	Goleta.
Colt	C. Hazelrigg	Santa Maria.
Princess, filly	T. M. Lewis	Goleta.
Queen, filly	T. M. Lewis	Goleta.
John, colt	Samuel Robinson	Santa Barbara.
Jesse, colt	Samuel Robinson	Santa Barbara.
Dagobert, stallion	F. T. Underhill	Los Alamos.
Compromise, stallion	S. Hobbs	Santa Maria.
Jessie, mare	A. Turk	Los Alamos.
Colt	A. Turk	Los Alamos.
Topsy, filly	E. P. Sawyer	Carpenteria.
Lord Derby, colt	E. P. Sawyer	Carpenteria.
Lilly, mare	Thomas Leslie	Los Alamos.
Daisy, colt	E. Doty	Naples.
Kate, mare	D. Carter	Santa Barbara.
Pet, mare	B. S. Sutton	Carpenteria.
Dolly, filly	B. S. Sutton	Carpenteria.
Ned, colt	T. Phillips	Goleta.
Ben Archer, stallion	J. Archer	Santa Barbara.
Ben Archer, stallion and five colts	J. Archer	Santa Barbara.

FIRST DEPARTMENT—Continued.

Name of Animal.	Owner.	Address.
Fly, mare.....	L. G. Oliver.....	Santa Barbara.
Newry, colt.....	W. E. Johnson.....	Santa Barbara.
Maggie, mare.....	W. E. Johnson.....	Santa Barbara.
Dandy, colt.....	W. E. Johnson.....	Santa Barbara.
CLASS VI—SADDLE HORSES.		
Peachie, horse.....	H. W. Lawrence.....	Santa Barbara.
CLASS VII—MULES.		
Pair of mules.....	Jno. Pyster.....	Carpenteria.
CLASS VIII—JACKS AND JENNIES.		
Commodore Stockton, jack.....	F. T. Underhill.....	Los Alamos.
CLASS II—CATTLE—THOROUGHbred JERSEYS.		
Pansy, cow.....	A. C. J. Wilson.....	Santa Barbara.
Annie H, cow.....	A. C. J. Wilson.....	Santa Barbara.
Henry 8th, bull.....	A. C. J. Wilson.....	Santa Barbara.
Lottie H, cow.....	A. C. J. Wilson.....	Santa Barbara.
Pansy 2d, cow.....	A. C. J. Wilson.....	Santa Barbara.
Mattie H, cow.....	A. C. J. Wilson.....	Santa Barbara.
Boz, bull.....	A. C. J. Wilson.....	Santa Barbara.
CLASS III—GRADED JERSEYS.		
Mary, cow.....	J. Archer.....	Santa Barbara.
Cal.....	J. C. Hamer.....	Santa Barbara.
CLASS VI—GRADES.		
Lucy, cow.....	C. L. Hunt.....	Santa Barbara.
Cow.....	Jas. Delaney.....	Santa Barbara.
Heifer.....	Jas. Delaney.....	Santa Barbara.
CLASS IX—SWINE.		
Ben, boar.....	A. H. Phillips.....	Goleta.
Sow and ten pigs.....	A. H. Phillips.....	Goleta.
Jack, boar.....	T. M. Lewis.....	Santa Barbara.
Jim Blaine, Essex boar.....	Jos. Faulding.....	Santa Barbara.
Queen, Essex sow.....	Jos. Faulding.....	Santa Barbara.
Three Essex pigs.....	Jos. Faulding.....	Santa Barbara.
Jack, boar.....	Jos. Faulding.....	Santa Barbara.
Sow and pigs.....	Jas. Delaney.....	Santa Barbara.
Grade boar.....	Jas. Delaney.....	Santa Barbara.
Grade sow.....	Jas. Delaney.....	Santa Barbara.
POULTRY.		
Trio of ducks.....	Wm. Robinson.....	Santa Barbara.
Game fowls.....	Wm. Robinson.....	Santa Barbara.
Game hen and chickens.....	Wm. Robinson.....	Santa Barbara.
Trio of Pekin ducks.....	H. Frabe.....	Santa Barbara.
Six wild pigeons.....	A. Lambert.....	Carpenteria.
Six Langshan chickens.....	J. M. Garrettson.....	Santa Barbara.
Coop Jacobin pigeons.....	H. F. R. Vail.....	Santa Barbara.
Coop Spotted Fantail pigeons.....	H. F. R. Vail.....	Santa Barbara.
Coop Tenbit pigeons.....	H. F. R. Vail.....	Santa Barbara.
Coop Tumbler pigeons.....	H. F. R. Vail.....	Santa Barbara.
Coop Carrier pigeons.....	H. F. R. Vail.....	Santa Barbara.
Coop Turkish pigeons.....	H. F. R. Vail.....	Santa Barbara.
Coop blue Fantail pigeons.....	H. F. R. Vail.....	Santa Barbara.
Pair Guinea pigs.....	H. F. R. Vail.....	Santa Barbara.
Trio Rouen ducks.....	Clark Spring.....	Montecito.
Coop Fantail pigeons.....	Burt Starr.....	Santa Barbara.
Three cages canaries.....	Mrs. M. A. Spring.....	Montecito.
Trio Brown Leghorns.....	J. C. Hamer.....	Santa Barbara.
Trio Langshans.....	Jas. Delaney.....	Santa Barbara.
Trio Pekin ducks.....	Jas. Delaney.....	Santa Barbara.
Cage canaries.....	Mrs. O. M. Covarrubias.....	Santa Barbara.

PREMIUMS AWARDED—1888.

FIRST DEPARTMENT.

Name of Animal.	Exhibitor.	Address.	Award.
CLASS II—ROADSTERS.			
Cashmir, stallion	J. N. Johnson	Santa Barbara	\$8 00
Victorio, mare	J. N. Johnson	Santa Barbara	\$10 00
Nellie S, mare	G. C. Welsh	Santa Barbara	\$5 00
Electro, stallion	Merritt & Murray	Santa Maria	\$15 00
Allen G, colt	D. F. Oglesby	Santa Barbara	\$2 00
Hesper, colt	T. Leslie	Santa Maria	\$4 00
McCarty, mare	T. J. Brookshire	Santa Maria	\$6 00
Glencoe, horse	T. J. Brookshire	Santa Maria	\$3 00
Dexter, stallion	A. J. Gillett	Lompoc	\$6 00
Garfield, colt	F. Rodriguez	Santa Barbara	\$2 00
Dashwood, colt	E. A. Hollister	Goleta	\$5 00
Mollie D, mare	J. G. Doty	Dos Pueblos	\$3 00
Dan Rice, stallion and five colts	J. G. Doty	Dos Pueblos	\$15 00
Fox, colt	A. Martin	Carpenteria	\$4 00
Lulu M, mare	A. C. J. Wilson	Santa Barbara	\$2 00
Agnes and Perica, pair of matched roadsters	O. M. Covarrubias	Santa Barbara	\$10 00
Mollie W, filly	G. C. Welsh	Santa Barbara	\$5 00
CLASS III—DRAFT HORSES.			
Infelice, mare	T. Phillips	Goleta	\$10 00
Mollie, mare	E. Doty	Naples	\$5 00
Dolly, mare	A. H. Phillips	Goleta	\$6 00
Lotty, filly	F. M. Sentenney	Carpenteria	\$5 00
Pellegree, colt	R. Romero	Santa Barbara	\$2 00
El Kadir, stallion	T. Phillips	Goleta	\$15 00
El Kadir, stallion and five colts	T. Phillips	Goleta	\$15 00
Charlie, stallion	T. Phillips	Goleta	\$3 00
Prince, stallion	T. Phillips	Goleta	\$5 00
Stonewall, stallion	T. Phillips	Goleta	\$2 00
Lester and George, two colts	T. Phillips	Goleta	\$4 00
Polly K, filly	C. H. Kelton	Santa Barbara	\$3 00
Monte, stallion	John Pyster	Carpenteria	\$6 00
Aledo, stallion	T. Phillips	Goleta	\$8 00
CLASS IV—CARRIAGE HORSES.			
Tom, horse	Wm. Robinson	Santa Barbara	\$5 00
Pair of gray mares	G. C. Welsh	Santa Barbara	\$5 00
Pair of sorrel horses	B. Parker	Lompoc	\$10 00
CLASS V—HORSES FOR ALL PURPOSES.			
Don Patricio, stallion	I. K. Fisher	Santa Barbara	\$15 00
Kate, mare	A. H. Phillips	Goleta	\$10 00
Ben Wade, colt	A. H. Phillips	Goleta	\$4 00
—, colt	C. Hazelrigg	Santa Maria	\$6 00
Jesse, colt	Samuel Robinson	Santa Barbara	\$6 00
Dagobert, stallion	F. T. Underhill	Los Alamos	\$8 00
Jessie, mare	A. Turk	Los Alamos	\$5 00
Topsy, filly	E. P. Sawyer	Carpenteria	\$5 00
Dolly, filly	B. S. Sutton	Carpenteria	\$2 00
Ned, colt	T. Phillips	Goleta	\$2 00
Ben Archer, stallion and five colts	J. Archer	Santa Barbara	\$15 00
Newry, colt	W. E. Johnson	Santa Barbara	\$5 00
—, colt	A. Turk	Los Alamos	\$5 00
CLASS VII—MULES.			
Pair of matched mules	John Pyster	Carpenteria	\$8 00

FIRST DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
CLASS II—CATTLE—THOROUGH-BRED JERSEYS.			
Annie H, cow	A. C. J. Wilson	Santa Barbara	\$6 00
Henry 8th, bull	A. C. J. Wilson	Santa Barbara	\$8 00
Lottie H, cow	A. C. J. Wilson	Santa Barbara	\$4 00
Pansy 2d, cow	A. C. J. Wilson	Santa Barbara	\$3 00
Mattie H, heifer	A. C. J. Wilson	Santa Barbara	\$4 00
CLASS III—GRADED JERSEYS.			
May, cow	J. Arthur	Santa Barbara	\$6 00
Calf	J. C. Hamer	Santa Barbara	\$2 00
CLASS VI—GRADES.			
Cow	Jas. Delaney	Santa Barbara	\$5 00
Heifer	Jas. Delaney	Santa Barbara	\$3 00
CLASS IX—SWINE.			
Ben, boar	A. H. Phillips	Goleta	\$5 00
Sow and ten pigs	A. H. Phillips	Goleta	\$5 00
Jack, boar	T. M. Lewis	Santa Barbara	\$2 50
Essex swine	J. Faulding	Santa Barbara	\$3 00
Sow and pigs	Jas. Delaney	Santa Barbara	\$2 00
Graded boar	Jas. Delaney	Santa Barbara	\$3 00
Graded sow	Jas. Delaney	Santa Barbara	\$3 00
POULTRY.			
Trio of ducks	Wm. Robinson	Santa Barbara	\$2 00
Game fowls	Wm. Robinson	Santa Barbara	\$2 00
Hen and chickens	Wm. Robinson	Santa Barbara	\$2 00
Wild pigeons	Albert Lambert	Carpenteria	\$2 00
Langshan chickens	J. M. Garrettson	Santa Barbara	\$2 00
Exhibit of fancy pigeons	H. F. R. Vail	Santa Barbara	\$5 00
Guinea pigs	H. F. R. Vail	Santa Barbara	\$2 00
Canaries	Mrs. M. A. Spring	Montecito	\$2 00
Trio of Brown Leghorns	J. C. Hamer	Santa Barbara	\$2 00
Jacobin pigeons	H. F. R. Vail	Santa Barbara	\$2 00
Best ducks of any breed	Jas. Delaney	Santa Barbara	\$2 00

SECOND DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I—FARM PRODUCTS.			
Corn on the stalk	Wm. Robinson	Santa Barbara	\$2 00
Yellow corn	A. H. Phillips	Goleta	\$2 00
Wheat	A. Turk	Los Alamos	\$2 00
Best display of farm products	E. P. Sawyer	Carpenteria	\$10 00
Potatoes	William Begg	Goleta	\$1 00
Cabbage	William Begg	Goleta	\$2 00
Popcorn on the stalk	E. Doty	Naples	\$2 00
Tomatoes	A. B. Sutton	Carpenteria	\$2 00
Largest watermelon	J. Langman	Santa Barbara	\$1 00
Corn in the ear	James Ward	Goleta	\$2 00
Beets	A. Martin	Carpenteria	\$2 00
Sweet corn	A. Martin	Carpenteria	\$2 00
Tobacco	R. Vialoa	Carpenteria	\$2 00
Best flavored watermelon	R. Vialoa	Carpenteria	\$1 00
Sweet potatoes	J. R. Thurmond	Carpenteria	\$1 00
Onions	J. R. Thurmond	Carpenteria	\$2 00
English walnuts	J. R. Thurmond	Carpenteria	\$2 00
White beans	J. R. Thurmond	Carpenteria	\$2 00
Lima beans	J. R. Thurmond	Carpenteria	\$2 00
Best display of garden products	George Williams	Santa Barbara	\$10 00
White corn	J. R. Thurmond	Carpenteria	\$2 00
Muskmelons	A. Martin	Carpenteria	\$1 00
Squash	W. N. Roberts	Goleta	\$2 00

SECOND DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS II—MISCELLANEOUS PRODUCTS.			
Roll of butter	Mrs. E. P. Sawyer.	Carpenteria	\$5 00
Butter, fifty pounds	William Begg.	Goleta	\$12 00
Cake	Mrs. C. F. Rystrom	Carpenteria	\$5 00
Bread	Mrs. C. F. Rystrom	Carpenteria	\$5 00
Bacon and ham	L. J. Olliver	Santa Barbara	\$5 00
Pastry	Mrs. G. C. Packard.	Montecito	\$4 00
Packed butter	L. G. Olliver.	Santa Barbara	\$3 50
LADIES' DEPARTMENT.			
Knitting	Mrs. A. Henning.	Lompoc	\$2 00
Pillow shams	Mrs. E. Marcy.	Santa Barbara	\$2 00
Patchwork quilt	Mrs. E. Marcy.	Santa Barbara	\$3 00
Best exhibit of needlework	Mrs. M. F. Lucas.	Santa Barbara	Sil. med.
Feather work	Mrs. M. A. Spring.	Montecito	\$3 00
Slippers	Mrs. Conrad	Montecito	\$2 00
Tatting	Miss Coffin	Santa Barbara	\$1 00
Drawn work	Mrs. Covarrubias.	Santa Barbara	\$3 00
Shell work	Mrs. Covarrubias.	Santa Barbara	\$2 00
Crochet work	Mrs. L. Loyd	Santa Barbara	\$2 00
Plain sewing	Mrs. L. Loyd	Santa Barbara	\$3 00
Thread lace	Mrs. Henning.	Lompoc	\$2 00
Moss work	Mrs. J. Miller.	Santa Barbara	\$2 00
Table scarf	Miss E. Gallagher	Santa Barbara	\$2 00
Crazy quilt	Mrs. E. Smith	Santa Barbara	\$3 00
Wax work	Mrs. R. S. Newbury	Goleta	\$2 00
Applique work	Miss E. Gallagher	Santa Barbara	\$2 00
Embroidery	Mrs. Conrad	Montecito	\$2 00
FINE ARTS.			
Sign painting	F. W. Judd.	Santa Barbara	Sil. med.
Landscape, in oil	F. W. Judd.	Santa Barbara	Sil. med.
Oil paintings	Miss J. Ingham	Santa Barbara	Sil. med.
Photographs	W. J. Rea	Santa Barbara	Sil. med.
India ink drawing	Mrs. R. S. Newbury	Goleta	Sil. med.
Flowers, in oil	Miss E. Thompson	Santa Barbara	Sil. med.
Wood graining	A. Hardcastle.	Santa Barbara	Sil. med.
Crayon drawing	Miss May Dugan.	Santa Barbara	Sil. med.
MANUFACTURES OF THIS COUNTY.			
Wagon	Hunt, Son & Schuster.	Santa Barbara	Sil. med.
Furniture upholstering	F. H. Knight.	Santa Barbara	Sil. med.
Articles from California woods	J. W. Casebeer	Santa Barbara	Sil. med.
Stamped leather work	S. Loomis	Santa Barbara	Sil. med.
Double harness	S. Loomis	Santa Barbara	Sil. med.
Iron work	L. D. Gates.	Santa Barbara	Sil. med.
Confectionery	J. E. Tapley	Santa Barbara	Sil. med.
Sanitary plumbing	J. H. Varney	Santa Barbara	Sil. med.
Taxidermist work	N. Lambat	Carpenteria	Sil. med.
MUSICAL INSTRUMENTS.			
Violin	J. W. Casebeer	Santa Barbara	Sil. med.
BABIES.			
Goldy, prettiest baby over six months old	Mrs. Wade	Santa Barbara	Solid silver cup.
William Henry, next prettiest baby over six months old	Mrs. Harrison.	Santa Barbara	Sil. plated cup.
Charlie Hunt, prettiest baby under six months old	Mrs. Wicks.	Santa Barbara	Solid silver cup.
Lottie May, next prettiest baby under six months old	Mrs. Sutton	Carpenteria	Sil. plated cup.
MERCHANDISE.			
Dry goods	A. Garland & Son	Santa Barbara	Sil. med.
Clothing	C. H. Frink	Santa Barbara	Sil. med.
Hardware	Schenck & Hawley	Santa Barbara	Sil. med.
Furniture	F. H. Knight	Santa Barbara	Sil. med.

SECOND DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Agricultural implements	Schenck & Hawley	Santa Barbara	Sil. med.
Fancy goods	Chung Wong	Santa Barbara	Sil. med.
Boots and shoes	Emerson & Co.	Santa Barbara	Sil. med.
Harness, etc.	L. J. Dixon	Santa Barbara	Sil. med.
Side saddle	L. J. Dixon	Santa Barbara	Sil. med.
FRUIT, ETC.			
Jellies and jams	Mrs. John Spence	Santa Barbara	\$3 00
Preserved fruits in glass	Mrs. John Spence	Santa Barbara	\$3 00
Dried fruits	Wm. Jackson	Lompoc	\$5 00
Strawberries	J. E. Shepherd	Carpenteria	\$1 00
Oranges	J. E. Shepherd	Carpenteria	\$2 00
Peaches	E. A. Hollister	Goleta	\$2 00
Pears	E. A. Hollister	Goleta	\$2 00
Apples	E. A. Hollister	Goleta	\$2 00
Plums and prunes	E. A. Hollister	Goleta	\$2 00
Jellies from grapes and berries	Mrs. A. B. Sutton	Carpenteria	\$3 00
Jellies from pitted fruits	Mrs. L. G. Oliver	Santa Barbara	\$3 00
Blackberries	M. A. Spring	Montecito	\$1 00
Pickled olives	M. A. Spring	Montecito	\$1 00
Canned fruit	Mrs. G. C. Packard	Montecito	\$3 00
Best display of products of orchard and vineyard	George Williams	Santa Barbara	\$10 00
Jellies from apples, pears, etc.	Mrs. G. C. Packard	Montecito	\$3 00
Lemons	G. C. Packard	Montecito	\$2 00
Sweet pickles	Mrs. B. Concklin	Montecito	\$2 00
Best exhibit of deciduous fruit	Lompoc Grange	Lompoc	Sil. med.
Fine exhibit of grapes and fruit	O. Holden	Goleta	Sil. med.
PLANTS AND FLOWERS.			
Flowers	Joseph Sexton	Goleta	\$10 00
Flowering plants	John Spence	Santa Barbara	\$10 00
Palms in boxes	John Spence	Santa Barbara	\$10 00
Ferns in boxes	John Spence	Santa Barbara	\$6 00
Named roses	John Spence	Santa Barbara	\$7 00
Parlor bouquet	John Spence	Santa Barbara	\$2 50
Basket of flowers	John Spence	Santa Barbara	\$4 00
Wild flowers	Mrs. John Spence	Santa Barbara	\$4 00
FINAL.			
Alfalfa hay	E. P. Sawyer	Carpenteria	\$1 00
Sewing machines	Davis Sewing Machine Company	Santa Barbara	Sil. med.
Arizona deer	R. Vialoa	Carpenteria	\$3 00
Gold fish	Mrs. H. Loyd	Santa Barbara	\$1 00
Collection of coins	F. W. Casebeer	Santa Barbara	\$1 00
Machine embroidery	Davis Sewing Machine Company	Santa Barbara	Sil. med.
Saddles	S. Loomis	Santa Barbara	Sil. med.
Honey	J. R. Thurman	Carpenteria	\$2 00

SPEED PROGRAMME.

TUESDAY, AUGUST 28, 1888.

RACE No. 1—TROTTING.

For named horses. Purse, one hundred dollars. Sixty dollars to first horse; forty dollars to second. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Delta, s. g., unknown	G. F. Ellis	Santa Barbara.
Don Nicolas, b. g., by Nutwood	A. S. More	Santa Barbara.
Sorrel Tom, s. g., by Patchen	A. Den	Santa Barbara.
Anselmo H (formerly José O), g. s., by Richmond	E. S. Cordero	Santa Barbara.

SUMMARY.

Sorrel Tom	2	1	1	1
Delta	1	4	2	3
Don Nicolas	3	2	3	2
Anselmo H	4	3	dis.	

Time—2:58 $\frac{3}{4}$; 2:57 $\frac{1}{4}$; 2:56; 2:49.

RACE No. 2—TROTTING.

For colts sired by stallion Dan Rice. Purse, one hundred and forty dollars. Sixty per cent to first horse; forty per cent to second. Mile heats; best two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Billy, blk. g., by Dan Rice	F. Ennis	Santa Barbara.
Lulu M, b. m., by Dan Rice; dam, Dinah	A. C. J. Wilson	Santa Barbara.
Dan, b. g., by Dan Rice	J. G. Doty	Santa Barbara.
Jerry, b. g., by Dan Rice	H. Delaney	Santa Barbara.

SUMMARY.

Jerry	1
Billy	dis.
Dan	dis. for running.
Lulu M	dis. for foul driving.

Time—3:50.

RACE No. 3—TROTTING.

For stallions owned in Santa Barbara County. Purse, one hundred and fifty dollars. Sixty per cent to first horse; forty per cent to second. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Bashaw, b. s., by Wopsy	R. R. Bennett	Lompoc.
Electro, blk. s., by Electioneer; dam, Fatima	Merritt & Murray	Santa Maria.
Rosewall, g. s., by Richmond; dam, by Creighton	H. Delaney	Santa Barbara.

SUMMARY.

Bashaw	1	1	2	2	1
Rosewall	2	2	1	1	2
Electro	3	3	dis.		

Time—2:34 $\frac{1}{4}$; 2:31 $\frac{1}{4}$; 2:34 $\frac{1}{4}$; 2:32 $\frac{3}{4}$; 2:32 $\frac{1}{2}$.

WEDNESDAY, AUGUST 29, 1888.

RACE No. 4—RUNNING.

Purse, one hundred and fifty dollars. Sixty per cent to first horse; forty per cent to second. Half mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Gen. Logan, b. s.	L. F. Ruiz	Santa Barbara.
Gladstone, s. g.	D. Sheehan	Los Angeles.
Sid Law, by Robbery Boy; dam, by Creighton.	E. R. Den	Santa Barbara.

SUMMARY.

Gladstone	1	1
Sid Law	2	2
Gen. Logan	3	3

Time—0:51 $\frac{1}{4}$; 0:50.

RACE No. 6—TROTTING.

For horses that have not beaten three minutes. Purse, one hundred and fifty dollars. Sixty per cent to first horse; forty per cent to second. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Black Jack, blk. g.	H. W. Fabing	Lompoc.
Henry, br. g.	F. D. Hall	Lompoc.
Dixie, b. g., by Norwood	H. W. Lawrence	Santa Barbara.
Lady Vic, b. m., by Independent	J. H. Williams	Dos Pueblos.
May Queen, br. m., by Enchanter; dam, by Blazing Star	F. T. Underhill	Los Alamos.
Ethan Allen, g. s.	John Murray, Jr.	Santa Maria.
Grayling, g. m.	John Murray, Jr.	Santa Maria.

SUMMARY.

Dixie	1	1	1
Henry	2	2	3
Lady Vic	3	3	2
Grayling	dis.		

Time—2:57; 2:51; 2:54 $\frac{1}{4}$.

THURSDAY, AUGUST 30, 1888.

RACE NO. 7—RUNNING.

Purse, two hundred dollars. Sixty per cent to first horse; forty per cent to second. Three quarters of a mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Consuello, b. s., by Grinstead; dam, Nina R.	E. R. Den	Santa Barbara.
Comanche, b. s., by Musy	Jesse Hill	Lompoc.
Gladstone, s. g.	D. Sheehan	Los Angeles.

SUMMARY.

Gladstone	1 1
Consuello	2 2
Comanche	3 3

Time—1:18½; 1:18½.

RACE NO. 8—RUNNING.

For two-year old colts. Purse, one hundred dollars. Sixty per cent to first horse; forty per cent to second. Mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Joe Dandy, b. g.	J. G. Doty	Santa Barbara.
Othello, b. s.	E. R. Den	Santa Barbara.

SUMMARY.

Othello	1
Joe Dandy	2

Time—2:02.

RACE NO. 9—TROTTING.

2:40 Class. Purse, two hundred dollars. Sixty per cent to first horse; forty per cent to second. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Electro, blk. s., by Electioneer; dam, Fatima ..	John Murray, Jr.	Santa Maria.
May Queen, br. m., by Enchanter; dam, by Blazing Star	H. Delaney	Santa Barbara.
Dixie, b. g., by Norwood	H. W. Lawrence	Santa Barbara.

SUMMARY.

Electro	2 1 1 1
May Queen	1 2 2 2
Dixie	3 3 3 3

Time—2:41½; 2:39¾; 2:36½; 2:40.

FRIDAY, AUGUST 31, 1888.

RACE No. 10—RUNNING.

For the Agricultural Association Cup; value, two hundred dollars. Entry fees to second and third horse, sixty and forty per cent. Mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Othello, b. s.	E. R. Den	Santa Barbara.
Consuello, b. s., by Grinstead; dam, Nina R.	E. R. Den	Santa Barbara.
Comanche, b. s., by Musy	Jesse Hill	Lompoc.
Ventura Maid, s. m.	L. F. Ruiz	Santa Barbara.

SUMMARY.

Comanche	1
Othello	2
Ventura Maid	3

Time—1:48 $\frac{3}{4}$.

RACE No. 11—TROTTING.

For named horses. Purse, eighty dollars. Sixty per cent to first horse; forty per cent to second. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Cashmir, b. s., by Sultan; dam, Peri	J. N. Johnson	Santa Barbara.
Delta, g. g.	G. F. Ellis	Santa Barbara.
Ethan Allen, g. s.	John Murray, Jr.	Santa Maria.

SUMMARY.

Ethan Allen	3	1	1	1
Delta	1	2	2	3
Cashmir	2	3	3	2

Time—3:01 $\frac{1}{2}$; 3:02 $\frac{1}{2}$; 3:07 $\frac{1}{4}$; 3:09.

RACE No. 12—TROTTING.

Free purse, two hundred and fifty dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Harry Velox, b. g., by Velox	E. R. Den	Santa Barbara.
Jim Blaine, blk. g.	P. J. Doyle	San Diego.

SUMMARY.

Harry Velox	1	1	1
Jim Blaine	2	2	2

Time—2:27 $\frac{3}{4}$; 2:36 $\frac{1}{4}$; 2:30 $\frac{1}{2}$.

SATURDAY, SEPTEMBER 1, 1888.

RACE No. 13—RUNNING.

Consolation Purse. For beaten horses. One hundred and fifty dollars. • Sixty per cent to first horse; forty per cent to second. Mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Sid Law, b. g., by Robbery Boy; dam by Creighton	E. R. Den	... Santa Barbara.
Gen. Logan, b. s.	L. F. Ruiz	... Santa Barbara.
Ventura Maid, s. m.	B. H. Benson	... Santa Barbara.

SUMMARY.

Sid Law	1
Gen. Logan	2
Ventura Maid	3

Time—1:50.

LADIES' TOURNAMENT.

WEDNESDAY, AUGUST 29, 1888.

Purse, thirty dollars. First prize, fifteen dollars; second prize, seven dollars and fifty cents; third prize, seven dollars and fifty cents. Three ladies present for competition.

Name.	Address.
Miss A. Sproul	
Mrs. Swain	
Miss M. Smith	

SUMMARY.

Miss A. Sproul	First Prize.
Mrs. Swain	Second Prize.
Miss M. Smith	Third Prize.

TRANSACTIONS

OF THE

TWENTY-FIRST DISTRICT AGRICULTURAL ASSOCIATION

For the Year 1888,

Composed of the Counties of Merced, Mariposa, and Fresno.

OFFICERS OF THE ASSOCIATION.

DR. LEWIS LEACH	President.
N. I. BALDWIN	Secretary.
W. H. MCKENZIE.....	Treasurer.

DIRECTORS.

WM. HELM	Fresno.
S. N. STRAUBE	Fresno.
J. H. HAMILTON.....	Fresno.
W. M. HUGHES.....	Fresno.

REPORT.

FRESNO, October 10, 1888.

To the honorable the State Board of Agriculture :

GENTLEMEN: The Directors of the Twenty-first District Agricultural Association submit this, their report of the transactions of said association, for the year ending this date.

N. I. BALDWIN, Secretary.

RECEIPTS AND EXPENDITURES.

Receipts.

Gate	\$2,991 20	
Grand stand	520 00	
Privileges	3,645 45	
Speed entrances	2,170 00	
Gate	50 00	
		<u>\$9,376 65</u>

Expenditures.

Paid purses, speed	\$4,310 00	
Paid for help, advertising, etc.	2,569 80	
Paid premiums for fair	885 50	
		<u>\$7,768 30</u>
Paid for sheds for cattle and box stalls for horses	\$1,000 00	
Paid for pavilion on grounds	4,864 00	
Paid for club house on grounds and furniture	12,886 00	
		<u>\$18,750 00</u>

PREMIUMS AWARDED—1888.

FIRST DEPARTMENT.

Name of Animal.	Exhibitor.	Address.	Award.
CLASS I—THOROUGHBRED HORSES.			
King Daniel, horse	N. W. Motheral	Hanford	2d prem.
Hubbard, horse	E. W. Richardson	Kings River	
Stella Clark, mare	Jo. Davis	Fresno	
Serpolette, mare	Owen Bros.	Fresno	
Crona, mare	Owen Bros.	Fresno	
Jocko, horse	W. L. Ashe	Fresno	1st prem.
Camilla, mare	W. L. Ashe	Fresno	1st prem.
CLASS II—FAMILIES.			
Dixie	J. H. Brown	Fresno	1st prem.
El Capitan	W. L. Ashe	Fresno	
CLASS III—DRAFT HORSES—STALLIONS.			
Jupiter	S. B. Holton	Selma	
Laven	Jo. Davis	Fresno	
Illers	P. B. Donahoo	Fresno	1st prem.
Jumbo	P. B. Donahoo	Fresno	1st prem.
Frank	T. Craig	Fresno	
Bonanza	J. H. Brown	Fresno	
GELDINGS AND MARES.			
Spy	James Vorhees	Fresno	
Nellie	James Vorhees	Fresno	
Jane	J. A. Richter	Fresno	1st prem.
CLASS IV—ROADSTERS.			
Clovis, stallion	S. N. Straube	Fresno	
Mattie Consuello, mare	S. N. Straube	Fresno	1st prem.
Seabreeze, stallion	S. B. Holton	Selma	
Clifton Belle, mare	L. D. Scott	Fresno	
Jay Gee Dee, stallion	J. G. Dawes	Wildflower	
Bay Prince, stallion	Geo. Collins	Fresno	
Raymond, stallion	D. J. McConnell	Fresno	
Daybreak, stallion	J. R. Jones	Fresno	1st prem.
William S, stallion	J. R. Jones	Fresno	
Nubian, stallion	S. A. Curley	Fresno	
Lily, mare	S. C. Booth	Fresno	
Lady Alice, mare	S. C. Booth	Fresno	
Joe Bowers, stallion	S. C. Booth	Fresno	
Bullet Hawk, stallion	I. A. Hodges	Fresno	
Romeo, stallion	Owen Bros.	Fresno	
Oliver B, stallion	Owen Bros.	Fresno	1st prem.
El Capitan, stallion	W. L. Ashe	Fresno	1st prem.
Napa Wilkes, stallion	A. F. Baker	Fresno	
Blondin, mare	A. F. Baker	Fresno	
Record, gelding	I. A. Bell	Fresno	
Black Bess, mare	I. A. Hodges	Fresno	
CLASS VII—HORSES FOR GENERAL PURPOSES.			
Ida Davis	S. N. Straube	Fresno	
Mattie Consuello	S. N. Straube	Fresno	
Theodocia	S. N. Straube	Fresno	
Seabreeze	S. B. Holton	Fresno	
Jim	L. D. Scott	Clifton	
Belle	L. D. Scott	Clifton	
Jane	J. A. Richter	Fresno	
Noell	Geo. Collins	Fresno	
Bay Prince	Geo. Collins	Fresno	

FIRST DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
Frank	T. Craig	Fresno .....	.....
Black Eagle	L. C. Smith	Fresno .....	.....
Bonanza	J. H. Brown	Fresno .....	.....
El Capitan	W. L. Ashe	Fresno .....	.....
Jocko	W. L. Ashe	Fresno .....	.....
Betty	W. L. Ashe	Fresno .....	.....
Terry Filly	W. L. Ashe	Fresno .....	.....
King Daniel	N. W. Motheral	Hanford .....	.....
Blondin	A. F. Baker	Fresno .....	.....
Maude	A. F. Baker	Fresno .....	.....
Minnie	A. F. Baker	Fresno .....	.....
Mollie	J. A. Ewing	Fresno .....	.....
CLASS VIII—COLTS.			
Millie H	S. N. Straube	Fresno	1st prem.
Elise	S. N. Straube	Fresno	1st prem.
Mattie Consuello	S. N. Straube	Fresno .....	.....
April Fool	J. H. Walker	Wildflower .....	.....
Charles	J. A. Richter	Fresno .....	.....
Sam	J. A. Richter	Fresno .....	.....
John	J. A. Ewing	Fresno .....	.....
Tanner Boy	F. W. Wilson	Clifton .....	.....
Starlight	F. W. Wilson	Clifton .....	.....
R. E. Lee	M. A. Cotton	Selma .....	.....
Rattler	D. J. McDonald	Fresno .....	.....
Jim Slick	D. J. McDonald	Fresno .....	.....
Frenchman	W. J. Prather	Fresno .....	.....
Six colts	J. H. Brown	Fresno .....	.....
Camilla's colt	W. L. Ashe	Fresno .....	.....
Starboul	Owen Bros.	Fresno	1st prem.
Lady Grace's colt	W. L. Ashe	Fresno .....	.....
Betty's filly	W. L. Ashe	Fresno .....	.....
Oregon Nell	W. L. Ashe	Fresno .....	.....
Maggie	G. W. Beall	Fresno .....	.....
Lizzie	G. W. Beall	Fresno .....	.....
.....	J. G. Dawes	Fresno	1st prem.
.....	A. Manuel	Fresno .....	.....
Six colts	S. N. Straube	Fresno	1st prem.
CLASS IX—SWEEPSTAKES.			
Mattie	S. N. Straube	Fresno	2d prem.
Clovis	S. N. Straube	Fresno	1st prem.
Seabreeze	S. B. Holton	Selma .....	.....
Jupiter	S. B. Holton	Selma .....	.....
Mattie Consuello	S. N. Straube	Fresno	1st prem.
Jane	J. A. Richter	Fresno .....	.....
Sam	J. A. Richter	Fresno .....	.....
Noell	Geo. Collins	Fresno .....	.....
Illers	P. B. Donahoo	Fresno .....	.....
Raymond	D. J. McConnell	Fresno .....	.....
April Fool	J. H. Walker	Wildflower .....	.....
El Capitan	W. L. Ashe	Fresno .....	.....
Jocko	W. L. Ashe	Fresno .....	.....
Camilla	W. L. Ashe	Fresno .....	.....
Betty	W. L. Ashe	Fresno .....	.....
King Daniel	N. W. Motheral	Hanford	2d prem.
CLASS I—CATTLE.			
Duke Kirklevington	S. N. Straube	Fresno .....	.....
Fitzwilliam	S. N. Straube	Fresno .....	.....
30th Kirklevington	S. N. Straube	Fresno .....	.....
Daisy's Boy	S. N. Straube	Fresno .....	.....
Model 2d	S. N. Straube	Fresno .....	.....
Welcome 3d	S. N. Straube	Fresno .....	.....
Nevada Belle	S. N. Straube	Fresno .....	.....
29th Rose	S. N. Straube	Fresno .....	.....
Cleveland Best	L. D. Scott	Clifton .....	.....
Gentle Annie	L. D. Scott	Clifton .....	.....
Lydia A	L. D. Scott	Clifton .....	.....

FIRST DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
Harry	L. D. Scott	Clifton .....	.....
Brock	L. D. Scott	Clifton .....	.....
Bonnie Blue Lathy	S. N. Straube	Fresno .....	.....
10th Rose Forest Home	S. N. Straube	Fresno .....	.....
Oxford Rose 4th	S. N. Straube	Fresno .....	.....
Red Dolly 14th	S. N. Straube	Fresno .....	.....
Red Dolly 23d	S. N. Straube	Fresno .....	.....
Red Dolly 30th	S. N. Straube	Fresno .....	.....
2d Earlot	A. Heilbron & Bro.	Wildflower .....	.....
Sir Stanley	A. Heilbron & Bro.	Wildflower .....	.....
Royal Barrington	A. Heilbron & Bro.	Wildflower .....	.....
36th Duke Gloster	A. Heilbron & Bro.	Wildflower .....	.....
Water Sparkle	A. Heilbron & Bro.	Wildflower .....	.....
Mabel	A. Heilbron & Bro.	Wildflower .....	.....
Jessie M.	A. Heilbron & Bro.	Wildflower .....	.....
Viscountess	A. Heilbron & Bro.	Wildflower .....	.....
Mayflower	A. Heilbron & Bro.	Wildflower .....	.....
Water Crystal	A. Heilbron & Bro.	Wildflower .....	.....
Dixie 2d	A. Heilbron & Bro.	Wildflower .....	.....
Lilly	A. Heilbron & Bro.	Wildflower .....	.....
Little Wonder	F. G. Berry	Wildflower .....	.....
Jennie Lee	F. G. Berry	Wildflower .....	.....
CLASS II.			
Echo	G. H. Walley	Fresno .....	.....
.....	Baird Bros.	Fresno .....	.....
.....	Baird Bros.	Fresno .....	.....
.....	Baird Bros.	Fresno .....	.....
.....	Baird Bros.	Fresno .....	.....
.....	W. J. Prather	Fresno .....	.....
Franklin	H. S. Pierce	Fresno .....	.....
Daisy	T. B. Lowry	Fresno .....	.....
Cutty Sark	Baird Bros.	Fresno .....	.....
Netherland Dan	Baird Bros.	Fresno .....	.....
CLASS III—HERDS.			
.....	S. N. Straube	Fresno .....	.....
.....	L. D. Scott	Clifton .....	.....
.....	S. N. Straube	Fresno .....	.....
.....	A. Heilbron & Bro.	Wildflower .....	.....
.....	A. Heilbron & Bro.	Wildflower .....	.....
.....	Baird Bros.	Fresno .....	.....
CLASS IV—SWEEPSTAKES.			
1st Duke of Kirklevington	S. N. Straube	Fresno .....	.....
Fitzwilliam	S. N. Straube	Fresno .....	.....
Model 2d	S. N. Straube	Fresno .....	.....
Oxford Rose 4th	S. N. Straube	Fresno .....	.....
Welcome 3d	S. N. Straube	Fresno .....	.....
Red Dolly 3d	S. N. Straube	Fresno .....	.....
Red Dolly 14th	S. N. Straube	Fresno .....	.....
30th Kirklevington	S. N. Straube	Fresno .....	.....
2d Earl of Aberdeen	A. Heilbron & Bro.	Wildflower .....	.....
Sir Stanley	A. Heilbron & Bro.	Wildflower .....	.....
Mabel	A. Heilbron & Bro.	Wildflower .....	.....
Water Sparkle	A. Heilbron & Bro.	Wildflower .....	.....
Family	A. Heilbron & Bro.	Wildflower .....	.....
Echo	G. H. Walley	Fresno .....	.....
CLASS XI—HOGS.			
J. D. Fiske	W. D. Grady	Fresno .....	.....
.....	W. D. Grady	Fresno .....	.....
Pen of pigs	W. D. Grady	Fresno	1st prem.
Family	W. D. Grady	Fresno	1st prem.
Chief	F. G. Berry	Fresno	1st prem.
Belle	F. G. Berry	Fresno	1st prem.
Chef	F. G. Berry	Fresno	1st prem.
Pair of pigs	F. G. Berry	Fresno	1st prem.

FIRST DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
POULTRY.			
Plymouth Rocks	L. D. Scott	Clifton	
Plymouth Rocks	L. D. Scott	Clifton	1st prem.
Red Game	W. J. Prather	Fresno	1st prem.
Pekin ducks	W. J. Prather	Fresno	1st prem.
Buff Cochins	F. G. Berry	Fresno	1st prem.
Leghorns	J. W. Pew	Fresno	1st prem.

SECOND DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS III—FINE ARTS.			
Landscape	Mrs. Davidson	Fresno	\$3 00
Portrait	Mrs. Dr. Caldwell	Fresno	\$3 00
Painting	Mrs. Winters	Fresno	\$3 00
Flower	Mrs. Fouts	Fresno	\$2 00
Painting	Mrs. Shelton	Fresno	\$1 00
Landscape	Mrs. Shelton	Fresno	\$2 00
Painting	Mrs. Fouts	Fresno	\$2 00
Flower	Mrs. J. S. Johnson	Visalia	\$2 00
India ink	Mrs. Dr. Caldwell	Fresno	\$2 00
Crayon portrait	Mrs. Shelton	Fresno	\$2 00
Drawing	Mrs. J. S. Johnson	Visalia	\$2 00
Stamping	Mrs. Burt	Fresno	\$2 00
Pastel work	Mrs. Connor	Fresno	\$2 00
Sketch	Mrs. Davidson	Fresno	\$1 00
Panel	Mrs. Fouts	Fresno	\$1 00
Plaque	Mrs. H. L. Yost	Fresno	\$1 00
Painting	Mrs. Burt	Fresno	\$2 00
Painting	Mrs. Burt	Fresno	\$1 00
Painting	Mrs. Winters	Fresno	\$2 00
Painting	Mrs. Davidson	Fresno	\$2 00
Painting	Mrs. Shelton	Fresno	\$2 00
Etching	Mrs. Johnson	Visalia	\$2 00
Collection	Mrs. Shelton	Fresno	\$20 00
Penmanship	Mrs. J. S. Johnson	Visalia	\$2 00
Penmanship	Stock. Bus. College	Stockton	Diploma.

THIRD DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS II—TEXTILE FABRICS.			
Silk	Mrs. Snow	Fresno	\$2 00
Kensington	Mrs. Waltz	Fresno	\$2 00
Fine work	Mrs. Waltz	Fresno	\$21 00
Table scarf	Mrs. Burt	Fresno	\$2 00
Etching	Mrs. Grimes	Fresno	\$2 00
Satin stitch	Mrs. Fleming	Fresno	\$1 00
Embroidery on lace	Mrs. Berry	Fresno	\$1 00
.....	Mrs. Pattison	Fresno	\$1 00
Hemstitching	Mrs. Fouts	Fresno	\$4 00
Fire screen	Mrs. Snow	Fresno	\$2 00
Silk quilt, etc.	Mrs. Waltz	Fresno	\$49 00
Silk quilt	Mrs. Thomas	Fresno	\$2 00
Silk work	Mrs. Burt	Fresno	\$7 00
Shawl	Mrs. Grimes	Fresno	\$2 00
Carriage robe	Mrs. Mursterbaugh	Fresno	\$2 00
Point lace	Mrs. Snow	Fresno	\$4 00
Netting	Mrs. Berry	Fresno	\$1 00

THIRD DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Tidy	Mrs. Davidson	Fresno	\$1 00
Feathers	Mrs. Carter	Fresno	Diploma.
.....	Mrs. Shelton	Fresno	\$1 00

FOURTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS I—FURNITURE, ETC.			
Rugs	D. Crise	Escondido	Diploma.
Cutlery	A. Warnekros	Fresno	Diploma.
Musical instruments	Baume & Drury	Fresno	Diploma.
Furniture	G. W. Thomas	Fresno	Diploma.
Furniture	Fresno Furniture Co.	Fresno	Diploma.
CLASS II—GUNS, ETC.			
General display	A. Warnekros	Fresno	Diploma.
CLASS III—VEGETABLES.			
Pumpkin	G. W. Beale	Fresno	\$2 00
Squash	G. W. Beale	Fresno	\$1 00
Beets	G. W. Beale	Fresno	\$1 00
CLASS VI—BREAD, CAKES, AND BUTTER.			
Bread	Mrs. Granger	Fresno	\$1 00
Cake	Mrs. Granger	Fresno	\$1 00
Cake	Mrs. Granger	Fresno	\$1 00

SEVENTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
Largest display of raisins	T. C. White	Fresno	\$15 00
Chestnuts	T. C. White	Fresno	\$3 00
Almonds	T. C. White	Fresno	\$3 00

SPEED PROGRAMME.

TUESDAY, SEPTEMBER 25, 1888.

RACE No. 1—RUNNING.

Six hundred yards and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Black Bess	J. A. Hodges	Fresno.
Spring Water	T. B. Lowry	Fresno.
Butcher Boy	J. Meyer	Madera.
Sleepy Dick	F. N. Starkey	Sacramento.
Cyclone	Smith & Howard	Sacramento.

SUMMARY.

Cyclone	1
Butcher Boy	2
Black Bess	dis.

Time—0:32½; 0:32½.

RACE No. 2—TROTTING.

Two-year olds.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Oliver B	Owens Bros.	Fresno.
Juanita	S. N. Straube	Fresno.
Lida C	J. N. Ayres	Visalia.
Prince	Geo. Collins	Fresno.

SUMMARY.

Lida C	1
Oliver B	2
Prince	3
Juanita	4

RACE No. 3—TROTTING—STALLIONS.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Bay Rose	J. N. Ayres	Visalia.
Alex Pasha	S. N. Straube	Fresno.
Clovis Congressman	S. N. Straube and J. Donahue	Fresno.
Barbaro	Owens Bros.	Fresno.
Daybreak	J. R. Jones	Fresno.
Waterford	C. H. Bowers	Fresno.

SUMMARY.

Bay Rose	1
Barbaro	2
Waterford	3

Time—2:26; 2:31; 2:31.

WEDNESDAY, SEPTEMBER 26, 1888.

RACE No. 4—RUNNING.

One mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Bay Bolton	R. Lacey	Fresno.
Sir Charles	W. D. Grady	Fresno.
Serpolette	Owens Bros.	Fresno.
Manzanita	F. Bustellos	Fresno.

Time—1:46 $\frac{3}{4}$.

RACE No. 5—TROTTING.

2:30 Class.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Lila S.	S. N. Straube	Fresno.
Barbaro	Owens Bros.	Fresno.
Gossiper	C. H. Durfee	Los Angeles.
Johnny Hayward	D. Maloney	Fresno.
Waterford	C. H. Bowers	Fresno.

SUMMARY.

Gossiper	1
Barbaro	2
Johnny Hayward	3

Time—2:29 $\frac{1}{2}$; 2:29 $\frac{1}{2}$; 2:31; 2:34.

RACE No. 6—TROTTING.

3:00 Class.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Bullet Hawk	J. A. Hodges	Fresno.
Congressman	J. Donahue	Fresno.
Daybreak	J. R. Jones	Fresno.
Dart	J. H. Kelly	Los Angeles.
Vicking	W. Ober	Los Angeles.

SUMMARY.

Congressman	1
Daybreak	2
Vicking	3
Bullet Hawk	dis.
Dart	dis.

Time—2:32 $\frac{1}{2}$; 2:33 $\frac{1}{2}$; 2:34.

RACE No. 7—RUNNING.

One mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Sir Charles	W. D. Grady	Fresno.
Elwood	Maltese Villa Stables	Sacramento.
Hermes	L. A. Blasingame	Fresno.
Oro	Owens Bros.	Fresno.

SUMMARY.

Hermes	1
Oro	2
Elwood	3
Sir Charles	4

THURSDAY, SEPTEMBER 27, 1888.

RACE No. 8—RUNNING.

Half mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Butcher Boy	J. Meyer	Madera.
Johnny Gray	Owens Bros.	Fresno.
Lida Ferguson	Smith & Howard	Sacramento.

SUMMARY.

Johnny Gray	1
Butcher Boy	2
Lida Ferguson	dis.

RACE No. 9—RUNNING.

Two-year olds.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Wildflower	A. B. Atwell	Wildflower.
Bay Jeff	Oscar Duke	Fresno.
Joaquin	F. Bustillos	Fresno.

SUMMARY.

Bay Jeff	1
Joaquin	2
Wildflower	dis.

Time—0:53 $\frac{1}{2}$; 0:53 $\frac{1}{4}$.

RACE No. 10—PACING.

2:29 Class.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Little Doc	Tom. Snyder	Sacramento.
Creole	W. Ober	Sacramento.
T B	Owens	Fresno.

SUMMARY.

Creole.....	1
Little Doc	2
T B	dis.
<i>Time</i> —2:46; 2:33½; 2:37½; 2:37½.	

FRIDAY, SEPTEMBER 28, 1888.

RACE No. 11—RUNNING.

Three-quarter mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Elwood	Maltese Villa Stables.....	Sacramento.
Susie S	Smith & Howard	Sacramento.
Sleepy Dick.....	F. M. Starkey	Sacramento.

SUMMARY.

Sleepy Dick	1
Elwood	2
Susie S	3

Time—1:17.

RACE No. 12—TROTTING.

2:35 Class.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Waterford	C. H. Bowers.....	Fresno.
Vicking	W. Ober.....	Sacramento.
Johnny Hayward.....	D. Malony	Fresno.

SUMMARY.

Waterford	1
Johnny Hayward	2
Vicking	3

Time—2:27; 2:28; 2:32½; 2:30.

RACE No. 13—TROTTING.

Free for all.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Hidalgo	E. O. Miller	Visalia.
Bay Rose	J. N. Ayres.....	Visalia.
Emma Temple.....	H. H. Helman	Fresno.
Don Tomas.....	C. H. Durfee	Los Angeles.
Valentine.....	J. H. Kelly.....	Los Angeles.

SUMMARY.

Don Tomas	1
Bay Rose	2
Valentine	3
Hidalgo	4
Emma Temple.....	dis.

Time—2:24; 2:23; 2:22; 2:28.

RACE No. 14—RUNNING.

Two miles—Novelty.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Elwood	Maltese Villa Stables	 Sacramento.
Oro	Owen Bros.	 Fresno.
Sir Charles	W. D. Grady	 Fresno.
Manzanita	F. Bustillos	 Fresno.

SUMMARY.

Elwood One mile, one and one half miles, two miles.
 Manzanita One half mile.

Time—3:40.

SATURDAY, SEPTEMBER 29, 1888.

RACE No. 15—TROTTING.

Yearlings.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Richmond Chief	J. Crawford	 Fresno.
Lizzie Thorn	S. N. Straube	 Fresno.
Otto T	J. N. Ayres	 Visalia.
Stella B	T. Bradon	 Fresno.

SUMMARY.

Stella B 1
 Lizzie Thorn 2
 Otto T 3
 Richmond Chief 4

Time—1:42½; 1:39¼.

RACE No. 16—SPECIAL TROTTING.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Hidalgo	E. O. Miller	 Visalia.
Gossiper	C. H. Durfee	 Los Angeles.
Ed	A. T. Jackson	 Los Angeles.
Emma Temple	H. H. Helman	 Fresno.

SUMMARY.

Emma Temple 1
 Hidalgo 2
 Ed 3
 Gossiper 4

Time—2:29; 2:28½; 2:30½.

RACE No. 17—RUNNING.

Six hundred yards.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Spring Water.....	T. B. Lowry.....	 Fresno.
Lida Ferguson.....	Smith & Howard	 Sacramento.
Johnny Gray	Owens Bros.	 Fresno.

SUMMARY.

Johnny Gray.....	1
Spring Water	2
Lida Ferguson	3

Time—0:33.

RACE No. 18—RUNNING.

Saddle race. One fourth mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Carl		
Mattie.....		
Black Bess.....		
Jack.....		

SUMMARY.

Black Bess	1
Jack	2
Mattie	3
Carl.....	4

Time—0:24.

TRANSACTIONS

OF THE

TWENTY-FIFTH DISTRICT AGRICULTURAL ASSOCIATION

For the Year 1888,

Composed of the Counties of Solano and Napa.

OFFICERS OF THE ASSOCIATION.

F. W. LOEBER	President.
A. H. CONKLING	Secretary.
W. J. McCOLLUM	Treasurer.

DIRECTORS.

M. M. ESTEE	Napa.
NATHAN COOMBS	Napa.
JOHN EVEN	Napa.
F. W. LOEBER	St. Helena.
L. W. BUCK	Vacaville.
A. T. HATCH	Suisun.
JAMES CLYNE	Benicia.
E. E. LEAKE	Dixon.

REPORT.

NAPA CITY, January 1, 1889.

To the honorable the State Board of Agriculture:

GENTLEMEN: The Directors of the Twenty-fifth District Agricultural Association submit this, their report of the transactions of said association, for the year ending this date.

A. H. CONKLING, Secretary.

RECEIPTS AND EXPENDITURES.

Receipts.

From trotters and runners—entries.....	\$2,545 00	
From pool privileges	1,288 50	
From sundry privileges	889 25	
From hack and bus licenses.....	255 00	
From tickets at fair grounds.....	3,174 40	
From tickets at pavilion	1,406 25	
From tickets at grand stand.....	854 90	
From State appropriation.....	1,250 00	
		<u>\$11,663 30</u>

Expenditures.

For purses—trotters and runners.....	\$7,537 50	
For premiums	1,288 00	
For music.....	265 00	
For printing and advertising	205 75	
For rent of pavilion	210 00	
For lumber for pavilion	233 37	
For miscellaneous accounts	1,027 14	
Balance on hand	896 54	
		<u>\$11,663 30</u>

Outstanding bills for 1888, due for entries unpaid, amounting to \$200, not included in the above report.

PREMIUMS AWARDED—1888.

FIRST DEPARTMENT.

Name of Animal.	Exhibitor.	Address.	Award.
CLASS I—THOROUGHBREDS—STALLIONS.			
Three years old	B. C. Holly	Vallejo	\$9 00
One year old	B. C. Holly	Vallejo	\$5 00
MARES.			
Four years old or over	B. C. Holly	Vallejo	\$8 00
Four years old or over	B. C. Holly	Vallejo	\$5 00
Three years old	B. C. Holly	Vallejo	\$6 00
Three years old	B. C. Holly	Vallejo	\$4 00
CLASS II—STANDARD TROTTERS—STALLIONS.			
Four years old or over	B. C. Holly	Vallejo	\$12 00
Four years old or over	Chas. Scott	Napa	\$6 00
Two years old	Mrs. S. Skinner	Napa	\$7 00
One year old	Mrs. S. Skinner	Napa	\$5 00
One year old	Mrs. S. Skinner	Napa	R. R.
Under one year	F. L. Coombs	Napa	\$3 00
Under one year	Mrs. S. Skinner	Napa	R. R.
MARES.			
Four years old or over	F. L. Coombs	Napa	\$8 00
Four years old or over	Mrs. S. Skinner	Napa	\$5 00
Two years old	Mrs. S. Skinner	Napa	\$5 00
One year old	Mrs. S. Skinner	Napa	\$3 00
One year old	T. C. Drake	Vallejo	R. R.
Under one year	B. C. Holly	Vallejo	\$2 50
Under one year	T. C. Drake	Vallejo	R. R.
CLASS III—ROADSTERS—STALLIONS.			
Four years old or over	T. B. Edington	Rutherford	\$12 00
Four years old or over	E. McGary	Suisun	\$6 00
Four years old or over	C. Reames	Suisun	\$3 00
Three years old	J. W. Smittle	Monticello	\$9 00
Stallion showing five colts	C. Reames	Suisun	\$15 00
Stallion, four years old or over showing best five colts	B. C. Holly	Vallejo	\$15 00
MARES.			
Four years old or over	P. H. Lennon	Napa	\$8 00
Four years old or over	J. Landrigan	Napa	\$4 00
Four years old or over	Mrs. S. Skinner	Napa	\$2 00
CLASS IV—CARRIAGE, SADDLE, AND GENTLEMEN'S ROADSTERS.			
Pair of mares to pole	H. W. Crabb	Oakville	\$10 00
Pair of mares to pole	T. C. Drake	Vallejo	\$5 00
Carriage team	R. M. Wheeler	St. Helena	\$10 00
Pair of geldings to pole	T. C. Chapman	Napa	\$5 00
Pair of geldings to pole	Wm. Imrie	Napa	\$2 50
Saddle mare	Mrs. T. C. Drake	Vallejo	\$5 00
Saddle mare	Drury Melone	Napa	\$2 50
Special roadsters	Geo. S. McKenzie	Monticello	\$5 00
CLASS V—DRAFT HORSES—STALLIONS.			
Four years old or over	P. D. Walsh	Vallejo	\$12 00
Two years old	J. W. Grigsby	Napa	\$7 00
One year old	K. Sackett	Napa	\$5 00
Under one year	A. McKenzie	Napa	\$3 00

FIRST DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
MARES.			
Four years old or over	K. Sackett	Napa	\$8 00
Four years old or over	J. T. Grigsby	Napa	\$5 00
Three years old	K. Sackett	Napa	\$6 00
Two years old	V. Posten	Napa	\$5 00
Under one year	K. Sackett	Napa	\$2 50
Pair of draft horses (special)	A. McKenzie	Napa	\$5 00
CLASS VI—GENERAL PURPOSES—STALLIONS.			
Three years old or over	Chas. Scott	Napa	\$12 00
Three years old or over	P. H. Lennon	Napa	\$6 00
Three years old or over (special)	F. Brughelli	Napa	\$6 00
Three years old or over (special)	F. Brughelli	Napa	\$6 00
Two years old	J. T. Grigsby	Napa	\$8 00
Two years old	G. W. McDonald	St. Helena	\$4 00
One year old	T. B. Edington	Rutherford	\$2 50
One year old	Wm. Imrie	Napa	R. R.
Under one year	F. Brughelli	Napa	\$3 00
Under one year	T. B. Edington	Rutherford	R. R.
MARES.			
Three years old or over	Mrs. T. C. Drake	Vallejo	\$10 00
Three years old or over	T. B. Edington	Rutherford	\$5 00
CLASS VII—JACKS, JENNIES, AND MULES.			
Jack, three years old or over	S. Newcomer	Pope Valley	\$10 00
Jenny, three years old or over	Mrs. S. Clark	Monticello	\$8 00
Jenny, three years old or over	Mrs. S. Clark	Monticello	R. R.
Colt, one year old	J. W. Reames	Suisun	\$2 50
Colt, four months old	Gracie Reames	Suisun	\$2 50
Mare, four years old	L. D. Durbin	Cordelia	\$5 00
Colt, under one year	L. D. Durbin	Cordelia	\$2 50
Colt	J. M. Thompson	Napa	\$2 50

SECOND DEPARTMENT.

Name of Animal.	Exhibitor.	Address.	Award.
CLASS VIII—CATTLE—SHORTHORNS.			
Bull, three years old or over	J. M. Mansfield	Napa	\$10 00
Bull, three years old or over	A. Clark	Monticello	\$5 00
Bull, two years old	A. Clark	Monticello	\$8 00
Bull, one year old	Chas. Scott	Napa	\$5 00
CLASS XII—POLLED ANGUS.			
Bull, three years old or over	Frisbie Bros. & Bailey	Suisun	\$10 00
Bull, under one year	Frisbie Bros. & Bailey	Suisun	\$2 00
Cow, three years old or over	Frisbie Bros. & Bailey	Suisun	\$8 00
Cow, three years old or over	Frisbie Bros. & Bailey	Suisun	\$4 00
CLASS XVIII—HOLSTEINS.			
Bull, three years old or over	J. W. Grigsby	Napa	\$10 00
CLASS XX—JERSEYS AND GUERNSEYS.			
Cow, three years old or over	S. Strong	Napa	\$8 00
Cow, three years old or over	S. Strong	Napa	\$5 00
CLASS XXII—GRADED CATTLE.			
Cow, three years old or over	Chas. Dixon	Napa	\$10 00
Bull, two years old	J. M. Mansfield	Napa	\$4 00

SECOND DEPARTMENT—Continued.

Name of Animal.	Exhibitor.	Address.	Award.
CLASS XXIX—SHEEP.			
Ram, Down, two years old or over	Wm. Middleton...	Napa	\$6 00
Three ewes, Down, two years old or over	Wm. Middleton...	Napa	\$5 00
Three ewes, Shropshire, two years old or over	Wm. Middleton...	Napa	\$2 50
Three ewes, Down, two years old or over	Wm. Middleton...	Napa	\$2 50
CLASS XXX—SWINE.			
Boar, Berkshire, one year old or over	A. Clark	Monticello	\$6 00
Boar, Poland, one year old or over	A. Clark	Monticello	\$6 00
Boar, Poland, one year old or over	F. Brughelli	Napa	\$3 00
Sow, China, one year old or over	F. Brughelli	Napa	\$5 00
Sow, China, and five pigs	F. Brughelli	Napa	\$6 00

THIRD DEPARTMENT.

Name of Animal.	Exhibitor.	Address.	Award.
CLASS XXXIII—POULTRY.			
Pair of Light Brahma fowls	W. C. Damon	Napa	\$2 00
Pair of Light Brahma chicks	W. C. Damon	Napa	\$1 00
CLASS XXXVII.			
Pair of Plymouth Rock fowls	J. W. Grigsby	Napa	\$2 00
Pair of Plymouth Rock chicks	J. W. Grigsby	Napa	\$1 00
CLASS XXXVIII.			
Pair of Wyandotte fowls	W. C. Damon	Napa	\$2 00
Pair of Wyandotte chicks	W. C. Damon	Napa	\$1 00
CLASS XLI.			
Pair of White Leghorn chicks	W. C. Damon	Napa	\$1 00
Pair of Brown Leghorn fowls	W. C. Damon	Napa	\$2 00
Pair of Brown Leghorn chicks	W. C. Damon	Napa	\$1 00
CLASS L.			
Pair of Bantam fowls	F. A. Buck	Napa	\$2 00
Pair of Bantam chicks	Wm. Imrie	Napa	\$1 00
CLASS LII.			
Pair of Bronze turkeys	H. Hagen	Napa	\$3 00
CLASS LVII.			
Pair of Toulouse geese	H. Hagen	Napa	\$2 50
CLASS LIX.			
Pair of Embden geese	Wm. Imrie	Napa	\$2 50
MISCELLANEOUS—SPECIAL.			
Guinea fowls	H. Hagen	Napa	\$2 50
Pair Langshan fowls	J. M. Mansfield	Napa	\$2 50

FOURTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS LXI.			
Best ten ears of white corn	J. M. Thompson	Napa	\$1 00
Best ten ears of yellow corn	J. W. Smittle	Monticello	\$1 00
Best five stalks of popcorn	J. D. Groth	Napa	\$1 00
Best corn on stalks	Geo. Griffith	St. Helena	\$1 00
Best sheaf of oats	J. W. Smittle	Monticello	\$1 00
Best sack of oats	J. W. Smittle	Monticello	\$2 00
Best sack of rye	A. V. Evans	Napa	\$2 00
Best sack of white wheat	Wm. Imrie	Napa	\$2 00
Best sheaf of wheat	J. W. Smittle	Monticello	\$1 00
Best corn on stalk	W. Boyce	Napa	\$1 00
CLASS LXII.			
Best six blood beets	L. M. Turner	Napa	\$1 00
Best six sugar beets	L. M. Turner	Napa	\$1 00
Best exhibit of beans	J. M. Thompson	Napa	\$2 00
Best exhibit of celery	J. Rossi	Napa	\$1 00
Best exhibit of carrots	J. Rossi	Napa	\$1 00
Best exhibit of cabbage	J. Rossi	Napa	\$1 00
Best exhibit of cauliflower	J. Rossi	Napa	\$1 00
Best exhibit of egg plant	J. M. Thompson	Napa	\$1 00
Best exhibit of mangel-wurzel beets	J. M. Thompson	Napa	\$1 00
Best collection of potatoes	J. M. Thompson	Napa	\$5 00
Best single variety of potatoes	J. M. Thompson	Napa	\$2 00
Best exhibit of pumpkins	J. W. Grigsby	Napa	\$2 00
Best exhibit of peas	A. V. Evans	Napa	\$1 00
Best exhibit of squashes	J. M. Thompson	Napa	\$2 00
CLASS LXIII.			
The largest and best collection of fruit raised in one orchard	J. M. Thompson	Napa	\$15 00
Second largest and best collection of fruit raised in one orchard	Mrs. R. E. F. Moore	Napa	\$5 00
Best exhibit of apples, not less than six varieties	Mrs. R. E. F. Moore	Napa	\$5 00
Best single variety of six apples	A. V. Evans	Napa	\$2 00
Best six varieties of apples, five each	Mrs. R. E. F. Moore	Napa	\$3 00
Best collection of pears, not less than six varieties	Mrs. R. E. F. Moore	Napa	\$5 00
Best single variety of six pears	John W. Smittle	Monticello	\$2 00
Best exhibit of peaches, not less than three varieties	J. M. Thompson	Napa	\$5 00
Best single variety of six peaches	L. C. Chapman	Napa	\$2 00
Best exhibit of plums, not less than three varieties	J. M. Thompson	Napa	\$5 00
Best six quinces	A. McKenzie	Napa	\$2 00
Best collection of wine grapes raised in one vineyard	H. W. Crabb	Oakville	\$10 00
Second best collection of wine grapes raised in one vineyard	C. King	St. Helena	\$7 00
Best exhibit of table grapes raised in one vineyard	T. H. Epley	Napa	\$10 00
Second best exhibit of table grapes raised in one vineyard	Mrs. D. R. Hunt	Napa	\$7 00
Best collection of figs	J. M. Thompson	Napa	\$2 00
Best collection of almonds	Smith Brown	Napa	\$2 00
Best collection of English walnuts, five pounds	J. W. Grigsby	Napa	\$2 00
Best exhibit of watermelons	A. V. Evans	Napa	\$1 00
Best exhibit of muskmelons	J. M. Thompson	Napa	\$1 00
Best exhibit of cantaloupes	J. M. Thompson	Napa	\$1 00
Best general exhibit—Special award	C. Lulwes	Napa	\$10 00
Special premium—Salway peaches	W. A. Fisher	Napa	\$1 00
Honorable mention—Black and white figs	Mrs. Salmina	Napa	\$2 00
Best exhibit of canned corn	Mrs. J. J. Swift	Napa	\$2 00
Best exhibit of Japanese persimmons	J. W. Grigsby	Napa	\$1 00

FOURTH DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS LXIV.			
Best exhibit of kiln-dried fruit	J. W. Roberts	Calistoga	\$5 00
Best exhibit of sun-dried fruit	J. M. Thompson	Napa	\$3 00
Best exhibit of sun-dried apples, two varieties, five pounds each	J. M. Thompson	Napa	\$2 00
Best exhibit of kiln-dried peaches, two varieties	J. W. Roberts	Calistoga	\$3 00
Best exhibit of sun-dried peaches, two varieties, five pounds each	J. M. Thompson	Napa	\$2 00
Best exhibit of kiln-dried plums, two varieties, five pounds each	J. W. Roberts	Calistoga	\$3 00
Best exhibit of sun-dried plums, two varieties, five pounds each	J. M. Thompson	Napa	\$2 00
Best exhibit of kiln-dried prunes, two varieties, five pounds each	J. W. Roberts	Calistoga	\$3 00
Best exhibit of dried figs	A. V. Evans	Napa	\$3 00
Best exhibit of domestic canned fruit, five varieties	Mrs. F. W. Smythe	Napa	\$2 00
Best exhibit of jellies, five varieties	Mrs. L. Coates	Napa	\$2 00
Best exhibit of preserves, three varieties	Mrs. H. A. Moore	Napa	\$3 00
Best exhibit of pickles, three varieties	Mrs. W. C. Damon	Napa	\$2 00
Best exhibit of catsup, three bottles	Mrs. H. A. Moore	Napa	\$1 50
Best exhibit of sun-dried prunes	H. L. Gibbs	Calistoga	\$2 00
CLASS LXV.			
Best ten rolls of fresh butter	F. Brughelli	Napa	\$5 00
Second best ten rolls of fresh butter	J. W. Grigsby	Napa	\$3 00

FIFTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS LXVI—WHITE DRY WINES.			
Best Riesling wine	Chas. Krug	St. Helena	\$5 00
Second best Riesling wine	H. W. Crabb	Oakville	\$2 50
Best Hock wine	Chas. Krug	St. Helena	\$5 00
Second best Hock wine	Chas. Krug	St. Helena	\$2 50
Best Sauterne wine	H. W. Crabb	Oakville	\$5 00
Second best Sauterne wine	Chas. Krug	St. Helena	\$2 50
Best exhibit of any other variety	H. W. Crabb	Oakville	\$5 00
Second best exhibit of any other variety	H. W. Crabb	Oakville	\$2 50
Sweepstake premium on best wine of above varieties	H. W. Crabb	Oakville	\$10 00
RED WINES.			
Best Burgundy wine	A. Brun & Co.	Rutherford	\$5 00
Second best Burgundy wine	H. W. Crabb	Oakville	\$2 50
Best Bordeaux wine	H. W. Crabb	Oakville	\$5 00
Second best Bordeaux wine	M. M. Estee	Napa	\$2 50
Best Zinfandel wine	A. Brun & Co.	Rutherford	\$5 00
Second best Zinfandel wine	Chas. Krug	St. Helena	\$2 50
Best exhibit of this variety	Chas. Krug	St. Helena	\$5 00
Second best exhibit of this variety	H. W. Crabb	Oakville	\$2 50
Sweepstake premium for best wine of this variety	H. W. Crabb	Oakville	\$10 00
Second sweepstake premium for best wine of this variety	M. M. Estee	Napa	\$5 00
SWEET WINES.			
Special premium on Tokay wine	H. W. Crabb	Oakville	\$3 00
Best Angelica wine	H. Hagen	Napa	\$3 00
Best Muscatel wine	H. W. Crabb	Oakville	\$3 00
Best Malaga wine	H. W. Crabb	Oakville	\$3 00
Best Madeira wine	H. W. Crabb	Oakville	\$3 00
Best Port, one year old	H. Hagen	Napa	\$3 00

FIFTH DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Best Port, two years old.....	H. W. Crabb	Oakville.....	\$3 00
Best Port of any age	H. W. Crabb	Oakville.....	\$3 00
Best Sherry	H. W. Crabb	Oakville	\$3 00
BRANDIES.			
Best grape brandy, vintage of 1887.....	H. W. Crabb	Oakville.....	\$3 00
Best grape brandy, vintage of 1886.....	H. W. Crabb	Oakville.....	\$3 00
Best grape brandy, any age.....	H. W. Crabb	Oakville.....	\$3 00
Special premium on blackberry brandy..	H. W. Crabb	Oakville.....	\$3 00

SIXTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
Best exhibit of carriages, buggies, and wagons	O. L. Henderson ..	Vallejo.....	\$10 00
Best carriage painting	Wm. Hunter.....	Napa	\$5 00
Best carriage trimming	O. L. Henderson ..	Vallejo.....	\$5 00
Best ironed buggy	Fowler & Son	Napa	\$3 00
Best set of double harness.....	J. Jepsen	Napa	\$7 00
Best set of single harness	J. Jepsen	Napa	\$5 00
Best saddle	J. Jepsen	Napa	\$2 50
Best silk cocoons	Jane Dadd	St. Helena	\$5 00
Best exhibit of leather	Sawyer Tan'ing Co.	Napa	Dip., \$5
Best exhibit of woolen goods	Napa Woolen Mills	Napa	Dip., \$5
Best pair of blankets	Napa Woolen Mills	Napa	\$3 00
Best exhibit of glue	Eugene Dunck.....	Napa	\$3 00
Best exhibit of California woods, polished	W. P. Corlett & S'ns	Napa	\$3 00
Best wood turning	W. P. Corlett & S'ns	Napa	\$2 00
Best mill work	W. P. Corlett & S'ns	Napa	Dip., \$5
Best compasses	Wm. Stephens	Napa	\$2 00
Best model gate	Tull & Lightner...	Napa	Diploma.
Special for best express wagon, sweep-stake premium	N. Howe	Napa	\$2 00
Best home manufactured buggy	G. A. Wright.....	Napa	\$2 00
Best exhibit of trees grown without irrigation (first premium)	L. Coates	Napa	Diploma.

SEVENTH DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
CLASS LXXIII.			
Best specimen of needlework, ten varieties	Mrs. W. C. S. Smith.	Napa	\$15 00
Second best specimen of needlework, ten varieties	Mrs. A. W. Norton.	Napa	\$5 00
Best family machine sewing.....	Mrs. W. C. S. Smith.	Napa	\$3 00
Best silk embroidery on silk, velvet, etc..	Fannie Briggs	Napa	\$3 00
Best worsted embroidery	Mrs. J. M. Thompson	Napa	\$2 50
Best embroidery on lace	Mrs. A. W. Norton	Napa	\$2 00
Best point lace work	Mrs. J. Crosbie	Napa	\$2 00
Best etching	Clara Wyatt	Rutherford	\$2 00
Best embroidered sofa cushion	Mrs. A. W. Norton.	Napa	\$2 00
Best embroidered fire screen	Annie Jones	Napa	\$3 00
Best kensington or satin stitch work in chenille	Mrs. A. W. Norton.	Napa	\$2 00
Best kensington work in crevel	Mrs. A. W. Norton.	Napa	\$2 00
Best crochet work in silk	Mrs. A. W. Norton.	Napa	\$2 00
Best crochet work in cotton	Minnie Smith.....	Napa	\$2 00
Best Spanish lace	Mrs. H. F. Norton.	Napa	\$2 00

SEVENTH DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Best guimpure lace work	Miss B. Hathaway	Napa	\$2 00
Best transferred work	Carrie Stockmon	Napa	\$2 00
Best crazy silk patchwork	Mrs. Jas. Crosbie	Napa	\$1 50
Best lambrequin	Miss E. Hargrave	Napa	\$2 00
Best arrasene work	Mrs. G. T. Smith	Napa	\$2 00
Best ribbon work	Mrs. J. Q. Green-		
	wood	Napa	\$2 00
Best afghan	Mrs. S. E. Holden	Napa	\$2 00
Best toilet set, not less than three pieces	Mrs. H. F. Norton	Napa	\$2 00
Best crochet shawl	Mrs. C. Baxter	Napa	\$2 00
Best tatting	Mrs. H. F. Norton	Napa	\$1 00
Best netting	Mrs. J. M. Thomp-		
	son	Napa	\$2 00
Best display of hand-knit underwear	Mrs. L. A. Maxwell	Napa	\$2 00
Best hearth rug	Mrs. A. McKenzie	Napa	\$2 00
Best pair of stockings	Mrs. A. W. Norton	Napa	\$2 00
Best fancy table scarf	Mrs. W. H. Gibbs	Napa	\$2 00
Best fancy knitting	Mrs. C. Peach	Napa	\$2 00
Best knit quilt	Mrs. A. V. Evans	Napa	\$2 00
Best silk quilt	Mrs. McFee	Napa	\$2 00
Best quilting	Mrs. D. R. Hunt	Napa	\$2 00
Best sofa pillow	Mamie Wakerly	Napa	\$1 50
Best baby's dress	Mrs. W. C. S. Smith	Napa	\$2 50
Best gent's shirt	Mrs. W. C. S. Smith	Napa	\$2 00
Best rag carpet	Mrs. E. E. Sawyer	Napa	\$2 00
Best Spanish drawn work	Mrs. M. W. Dodd	Napa	\$2 50
Best general exhibit in this department	Mrs. J. W. McFud-		
	gen	Dixon	\$5 00
Best general exhibit of crochet and etch-			
ing	Mrs. G. Wright	Napa	\$3 00
Best paper flowers	Miss B. Heegler	Napa	\$1 00
CLASS LXXIV.			
Best corn bread	Miss J. Rider	Napa	\$3 00
Best fruit cake	Mrs. H. A. Moore	Napa	\$3 00
Best pound cake	Mrs. H. A. Moore	Napa	\$3 00
Best sponge cake	Miss J. Rider	Napa	\$3 00
Best coffee cake	Miss G. Brownlee	Vallejo	\$3 00
Best assortment of tarts	Mrs. H. A. Moore	Napa	\$3 00
Best general exhibit in this class by one			
person	Mrs. H. A. Moore	Napa	\$10 00
CLASS LXXV.			
Best exhibit of needlework, three pieces	Miss C. Stockmon	Napa	\$5 00
Best crochet work	Miss C. Stockmon	Napa	\$2 00
Best transferred work	Miss C. Stockmon	Napa	\$2 00
Best etching	Miss C. Nichols	Napa	\$2 00
Best crazy patchwork	Miss M. Keller	Napa	\$2 00
Best crayon drawing	Miss Ethel Francis	Napa	\$2 00
Best hair work	Miss J. Q. Green-		
	wood	Napa	\$2 00
Best sponge cake	Miss G. Brownlee	Vallejo	\$2 00
Best exhibit of bread baking	Annie Van Auker	Napa	\$2 00
Best wheat bread	Olive Peach	Napa	\$3 00
Best Boston brown bread	Josie Rider	Napa	\$3 00
CLASS LXXVI.			
Best collection of paintings	Miss Lillie Fowler	Napa	\$10 00
Most extensive collection, with greatest			
variety of subjects	Miss C. Damon	Napa	\$7 50
Best collection of fruit paintings from			
nature	Mrs. L. Coates	Napa	\$7 50
Best oil painting	Miss Lillie Fowler	Napa	\$5 00
Second best oil painting	Miss M. Buford	Napa	\$2 50
Best painting on satin	Mrs. G. T. Smith	Napa	\$5 00
Best portrait in oil	Miss L. B. Kimball	Napa	\$5 00
Second best portrait in oil	Mrs. G. K. Drew	Yountville	\$2 50
Best portrait in water colors	Miss Lillie Fowler	Napa	\$5 00
Best portrait in crayon	Miss Annie Dixon	St. Helena	\$5 00

SEVENTH DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Second best portrait in crayon	Miss G. Norton...	Napa.....	\$2 50
Best portrait in pastel	Miss Etta Boothe ..	Napa.....	\$5 00
Best figure painting in oil	Miss Susie Claus ..	Napa.....	\$5 00
Chinese painting (special)	Miss G. Norton.....	Napa.....	\$5 00
Best painting in water colors	Miss Lillie Fowler ..	Napa.....	\$3 00
Second best painting in water colors	Miss V. R. Tays	Napa.....	\$2 00
Best landscape painting	Miss K. Even	Napa.....	\$5 00
Second best landscape painting	Mrs. C. L. Wines	Napa.....	\$2 50
Best marine painting	Miss M. Buford	Napa.....	\$5 00
Second best marine painting	Mrs. L. Coates	Napa.....	\$2 50
Best flower painting in oil	Miss M. Fowler	Napa.....	\$5 00
Best porcelain painting	Mrs. G. T. Smith	Napa.....	\$3 00
Second best porcelain painting	Miss F. Shamp	Napa.....	\$2 00
Best oil painting on wood	Miss M. Buford	Napa.....	\$5 00
Second best oil painting on wood	L. E. Ray	Napa.....	\$2 50
Best Kensington painting	Mrs. A. W. Norton ..	Napa.....	\$2 50
Best luster painting	Olive Peach	Napa.....	\$2 00
Best collection of photographs	J. W. Baker	Napa.....	\$5 00
Best specimen of pencil drawing	Maud Fowler	Napa.....	\$2 00
Best specimen of crayon drawing	Maud Fowler	Napa.....	\$2 00
Second best specimen of crayon drawing	Mrs. C. Wines	Napa.....	\$1 50
Best sketching from nature	Miss C. Damon	Napa.....	\$3 00
Best specimen of hair jewelry	Mrs. J. Q. Green- wood	Napa.....	\$2 00
Best specimen of feather work	Mrs. T. T. Belknap ..	Napa.....	\$2 00
Best specimen of wax flowers	Mrs. J. Q. Green- wood	Napa.....	\$3 00
Best specimen of moss work	Mrs. D. King	Napa.....	\$2 00
Best cabinet of minerals, etc.	C. Lulwes	Napa.....	Diploma.
Best juvenile oil painting	Sylvia Clifford	Napa.....	\$2 00
Best juvenile crayon drawing	Jas. Flamant.....	Napa.....	\$2 00

SPECIAL PRIZES AWARDED.

Article Exhibited.	Exhibitor.	Address.	Award.
Two pieces fancy paper work	Miss A. Dunigan	St. Helena	\$2 00
Tapestry banner painting	Miss Etta Boothe	Napa.....	\$2 00
Silk quilt	Mrs. J. B. Horrell	Napa.....	\$2 00
Pair knit pillow shams	Mrs. J. Grigsby	Napa.....	\$2 00
Crazy quilt	Mrs. Jas. Crosbie	Napa.....	\$2 00
Card fancy pompons	Mrs. G. F. Walker	Napa.....	\$2 00
Fancy painted banner	Annie James	Napa.....	\$2 00
Plush banner	Annie James	Napa.....	\$2 00
Crochet skirt	Mrs. L. Chapman	Napa.....	\$2 00
Fascinator	Mrs. R. Crouch	Napa.....	\$2 00
Point lace work	Mrs. M. Lucas	Napa.....	\$2 00
Cotton crochet lace	Bertha Heegler	Napa.....	\$2 00
Spanish drawn work	Miss J. Grigsby	Napa.....	\$2 00
Cotton crochet spread	Neilie Sanders	Napa.....	\$2 00
Silk patchwork quilt	Mrs. T. B. McClure ..	Napa.....	\$1 00
Crazy quilt	Mrs. H. F. Norton	Napa.....	\$1 00
Crazy quilt	Mrs. L. A. Maxwell ..	Napa.....	\$1 00
Crazy quilt	Miss Katie Even	Napa.....	\$1 50
Buggy robe	Miss Lillie Even	Napa.....	\$1 00
Picture	F. Mauredt	Napa.....	\$1 00
Log cabin quilt	Miss L. Calderwood ..	Napa.....	\$2 50

MISCELLANEOUS LIST.

Article Exhibited.	Exhibitor.	Address.	Award.
Best nectarines	L. M. Turner	Napa	\$2 00
Best apricots	L. M. Turner	Napa	\$2 00
Best six cans of corn	Mrs. J. J. Swift	Napa	\$2 00
Boxes olives and orange plants	A. Flamant	Napa	Diploma.
Guinea pigs and family	H. Stephens	Napa	\$1 00
Sheaf of oats	H. Stevens	Rutherford	\$2 00
Hand-carved wood work	Miss F. Shamp	Calistoga	\$5 00
One string of buttons (1,575)	Miss E. Bickford	Napa	\$1 00
Three specimens of pomegranates	Mrs. H. A. Moore	Napa	\$1 00
One case of birds eggs	R. Buck	Napa	\$1 00
One string of buttons (1,545)	Miss Ella Rider	Napa	\$1 00
Two boxes of fancy fish scale flowers	Miss T. VanSchiele	Calistoga	\$5 00
Model derrick	Geo. Rounds	Vallejo	\$2 00
Spanish bridle	I. M. Henderson	Napa	\$2 50
Sorgham cattle food	J. T. Grigsby	Napa	Diploma.
Best exhibit of Napa and sweet sodas	M. Silva	Napa	Diploma.
Best exhibit of silver brick and mineral ores produced in Napa County	R. F. Grigsby	Napa	Diploma.
Best exhibit of hardware, etc.	James & Son	Napa	\$5 00
Best exhibit of grain, flour, etc.	A. Hatt	Napa	Diploma.
Best exhibit of horseshoes	F. M. Denio	Vallejo	\$5 00
Second best exhibit of horseshoes	Wm. Hunter	Napa	\$2 50
Best exhibit of fancy sewing on the Do- mestic sewing machine	J. H. Johnson	Napa	Diploma.
Best exhibit of millinery and fancy goods	Mrs. McFee	Napa	Diploma.
Best exhibit of stationery and musical instruments	George T. Smith	Napa	Diploma.
Best exhibit of household furnishing goods	H. Schwartz	Napa	Diploma.
Best exhibit of fine furniture	Thompson Bros.	Napa	Diploma.
Best exhibit of fine China ware and lamps	J. A. McClelland & Co.	Napa	Diploma.
Best exhibit of fine carriages	J. Jepsen	Napa	Diploma.
Best exhibit of perfumery in showcases	Wm. Stewart	Napa	Diploma.
Best exhibit of drugs	J. H. Lovejoy	Napa	Diploma.
Best exhibit of dry goods	H. B. Winship	Napa	Diploma.

The Committee on Awards recommend the street and garden sprinkler of Rev. Dr. Wylie as a practicable and useful invention.

SPEED PROGRAMME.

TUESDAY, OCTOBER 2, 1888.

RACE No. 1—RUNNING.

Free for all. Twenty-five dollars entrance; ten dollars forfeit; two hundred dollars added; fifty dollars to second horse. Three quarters of a mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Nancy, by Jim Brown; dam, Nannie Hubbard.	B. C. Holly	Vallejo.
Welcome, by Warwick; dam, Aeola	D. Hennessey	San Francisco.
Notidle, by Wildidle; dam, by Monday	M. F. Tarpey	San Francisco.
Sid, unknown	F. Denio	Vallejo.
Carmen, by Wildidle; dam, Nettie Brown	W. L. Appleby	Santa Clara.
St. Patrick, by Hubbard; dam, by Monday	D. McGovern	Petaluma.

SUMMARY.

Notidle.....	1	1
Welcome.....	2	2

Time—1:16; 1:18.

RACE No. 2—RUNNING.

For all ages. Special purse. Twelve dollars and fifty cents entrance; one hundred and fifty dollars added. One mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Bessie Shannon, by Shannon; dam, Betty Bishop	J. Reavy	San Francisco.
Jack Brady, by Wildidle; dam, Sour Grapes	H. Stover	San Francisco.
Lucifer, by Hindoo	D. Hennessey	San Francisco.
Nabeau, by Nathan Coombs; dam, Beauty	Wm. Boots	Milpitas.

SUMMARY.

Jack Brady	1
Nabeau	2
Lucifer	3
Bessie Shannon	4

Time—1:45 $\frac{3}{4}$.

RACE No. 3—TROTTING AND PACING.

Special. Purse, two hundred and fifty dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Mambrino Chief, Jr., by Mambrino Eclipse; dam, Highland Maid	T. Smith	Vallejo.
Cora C, by Whippleton; dam, by Naubuc	H. B. Starr	Napa.
Colena, by Coligny; dam, by Casserly	M. Reames	Suisun.
Bud, by Gladiator	C. H. Gibbs	St. Helena.

TRANSACTIONS OF THE

SUMMARY.

Cora C	1	3	1	2	1
Bud	4	1	3	1	3
Mambrino Chief, Jr.	3	2	2	3	2
Colena	2	4	4	dis.	

Time—2:35 $\frac{1}{4}$; 2:34; 2:39; 2:33; 2:33 $\frac{1}{2}$.

RACE NO. 4—TROTTING.

2:30 Class. Purse, eight hundred dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Rosie Mc, by Alex Button; dam, Rosedale	G. W. Woodard	Yolo.
Elector, by Electioneer; dam, Lady Babcock	O. A. Hickok	San Francisco.
Express, by Electioneer; dam, Esther	Palo Alto Stock Farm	Palo Alto.
Ben Ali, by Geo. M. Patchen	J. Goldsmith	San Mateo.
Judge	J. A. Dustin	San Francisco.

SUMMARY.

Ben Ali	1	1	1
Elector	2	2	2

Time—2:27; 2:28; 2:30 $\frac{1}{2}$.

WEDNESDAY, OCTOBER 3, 1888.

RACE NO. 5—TROTTING.

2:20 Class. Purse, one thousand dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Lily Stanley, by Whippleton; dam, Dollie McMahon	F. L. & N. Coombs	Napa.
Woodnut, by Nutwood; dam, Addie	B. C. Holly	Vallejo.
Gertrude Russell, by Electioneer; dam, Winnie	Palo Alto Stock Farm	Menlo Park.
Alcazar, unknown	L. J. Rose	Los Angeles.

SUMMARY.

Woodnut	2	1	1	1
Lily Stanley	1	2	2	2

Time—2:17 $\frac{1}{2}$; 2:22 $\frac{1}{4}$; 2:22; 2:22.

RACE NO. 6—PACING.

2:25 Class. Purse, five hundred dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Little Hope, by Tempest; dam, Wilson's Bluebell	W. B. Bradbury	San Francisco.
Racquet, unknown	C. J. Havens	San Francisco.
Damiana, by Admiral	L. E. Clawson	San Francisco.
Prussian Boy, by General Burton; dam, Prussian Maid	P. Brandow	San Francisco
Goldleaf, by Sidney; dam, Fernleaf	Pleasanton St'k Farm	Pleasanton.
Ned Winslow, by Tom Burton	J. L. McCord	Sacramento.
San Diego, by Victor	H. C. Airhart	San Diego.
Tom Linderman, by Tom Kimball	F. W. Dyer	Salt Lake.

SUMMARY.

Goldleaf.....	1	1	1
San Diego.....	2	2	2
Damiana.....	3	3	3

Time—2:20½; 2:23; 2:15.

RACE No. 7—TROTTING.

District 2:40 Class. Purse, five hundred dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Burton, by Naubue.....	C. W. Gardner.....	Napa.
Economy, by Echo; dam, Lady Berky.....	B. C. Holly.....	Vallejo.
Van.....	J. Steffens.....	Vallejo.
Mambrino Chief, Jr., by Mambrino Eclipse; dam, Highland Maid.....	T. Smith.....	Vallejo.
Frank O'Neil, by Whippleton; dam, Slight.....	J. Corcoran.....	Petaluma.
Alcona, Jr., by Alcona; dam, Madora.....	J. P. Rodehaver.....	Petaluma.
Annetto, by Anteeo; dam, Emma Taylor.....	M. O'Reilly.....	Petaluma.
Mortimer, by Electioneer; dam, Mentie.....	W. Page.....	Sonoma County.
Roena, by Echo.....	G. Pacheco.....	Novato.

SUMMARY.

Burton.....	1	1	1
Van.....	2	2	2
Mortimer.....	4	3	3
Mambrino Chief, Jr.....	3	4	4

Time—2:30½; 3:33½; 2:32.

THURSDAY, OCTOBER 4, 1888.

RACE No. 8—RUNNING.

Free for all. Twenty-five dollars entrance; ten dollars forfeit; two hundred and fifty dollars added; fifty dollars to second horse. One mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Oscar Wilde, by Don Victor; dam, Esther.....	E. Yates.....	.....
Fusillade's Last, by J.M.Norton; dam, Fusillade.....	B. C. Holly.....	Vallejo.
Hermes.....	L. A. Blasingame.....	Fresno.
Sidon, by N. Coombs; dam, Gypsy.....	Wm. Boots.....	Milpitas.
Sid.....	F. M. Denio.....	Vallejo.
Index, by Thad Stevens.....	Wm. Boots.....	Milpitas.
Laura Gardner, by Jim Brown; dam, Avail.....	W. L. Appleby.....	Santa Clara.
St. Patrick, by Hubbard; dam, by Monday.....	D. McGovern.....	Petaluma.

SUMMARY.

Laura Gardner.....	1	1
Fusillade's Last.....	2	2

Time—1:44½; 1:46.

RACE No. 9—TROTTING.

3:00 Class. Purse, six hundred dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Perihelion, by Admiral; dam, Flora	W. S. Ray	San Francisco.
Sonnet, by Bentonian Sontag; dam, Dixie	Palo Alto Stock Farm	Menlo Park.
Lady Escott	J. A. Dustin	San Francisco.
Ross S	R. C. Sargent	Lodi.
Maggie E	S. B. Emerson .....	.....

Walkover for Perihelion.

RACE No. 10—RUNNING.

Special purse, one hundred and fifty dollars. One and one eighth miles dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Welcome, by Warwick	D. Hennessey	San Francisco.
Jack Brady, by Wildidle	H. Stover	San Francisco.
Index	William Boots	Milpitas.

SUMMARY.

Index	1
Welcome	2
Jack Brady	3

Time—1:56½.

RACE No. 11—TROTTING.

For all three-year olds in the district. Purse, four hundred dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Gasmeter	H. Jensen	St. Helena.
Ben Davis, by Great Tom; dam, Tena	B. C. Holly	Vallejo.
Anti-Coolie, by Anteo	D. R. Misner	Petaluma.
Alfred G	W. McGraw	Santa Rosa.
Redwood	A. McFayden	Santa Rosa.

SUMMARY.

Anti-Coolie	1	1	2	1
Ben Davis	2	2	1	2

Time—2:43; 2:42; 2:36½; 2:40.

RACE No. 12—TROTTING.

Special. Purse, two hundred dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Direct, by Director	A. McDowell	Pleasanton.
Perihelion, by Admiral	W. S. Ray	San Francisco.
Burton, by Naubuc	Gardner Bros.	Napa.

SUMMARY.

Direct.....	1	1	1
Burton.....	3	2	2
Perihelion.....	2	3	3

Time—2:29½; 2:33; 2:23.

FRIDAY, OCTOBER 5, 1888.

RACE No. 13—TROTTING.

2:25 Class. Purse, eight hundred dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Ben Ali, by Geo. M. Patchen, Jr.	San Mateo Stock Farm.	San Francisco.
Franklin, by General Reno	Chas. Davis .....	.....
Express, by Electioneer; dam, Esther	Palo Alto Stock Farm.	San Francisco.
Allo, by Altoona	A. C. Davenport	Stockton.

SUMMARY.

Ben Ali	2	2	1	1	1
Allo	3	1	2	2	2
Franklin	1	3	3	3	3

Time—2:25¼; 2:22½; 2:23½; 2:25; 2:23¾.

RACE No. 14—TROTTING.

District 2:30 Class. Purse, six hundred dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Flora B, by Whippleton	H. B. Starr	Napa.
Economy, by Echo; dam, Lady Berky	B. C. Holly	Vallejo.
Van, sire unknown	J. Steffens	Vallejo.
Mattie P, by Jackson Temple	Robert Brown	Petaluma.
Boss, by Gladiator	S. Sperry	Petaluma.

SUMMARY.

Flora B	1	1	1
Mattie P	3	2	2
Van	2	3	3
Boss	4	4	4

Time—2:33; 2:30; 2:29½.

RACE No. 15—TROTTING.

District two-year olds. Purse, four hundred dollars. Mile heats; best two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Captor, by Capri	A. J. Zane	Santa Rosa.
George Washington, by Mambrino Chief, Jr.; dam, Fannie Rose	T. Smith	Vallejo.
Gertie G, by Capri	R. D. Misner	Petaluma.
Eclectic, by Electioneer; dam, Marietta	W. Page	Sonoma County.
Redwin, by Sample, Jr.	J. W. Williams	St. Helena.

TRANSACTIONS OF THE

SUMMARY.

George Washington	2	1	1
Captor	1	2	2
Gertie G.	3	3	3

Time—2:48; 2:44; 2:51½.

RACE NO. 16—TROTTING.

Special purse for yearlings. Fifty dollars. One mile heat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Frank B, by Coligny; dam, by Casserly	W. T. Bartlett	Suisun.
R D, by Coligny	C. Reames	Suisun.
D H, by Coligny; dam, by Irwin Davis	D. Hale	Suisun.

SUMMARY.

Frank B.	1
D H.	2
R D.	3

Time—3:44½.

SATURDAY, OCTOBER 6, 1888.

RACE NO. 17—RUNNING.

Free for all. Twenty-five dollars entrance; ten dollars forfeit. Two hundred and fifty dollars added; fifty dollars to second horse. One and one quarter miles dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Oscar Wilde, by Don Victor; dam, Esther	E. Yates .....	.....
Fusillade's Last, by J. W. Norton; dam, Fusillade	B. C. Holly	Vallejo.
Hermes, by Jim Brown; dam, Herclaide	L. A. Blasingame .....	.....
Nancy, by Jim Brown; dam, Nannie Hubbard	B. C. Holly	Vallejo.
Welcome, by Warwick; dam, Aeola	D. Hennessey	San Francisco.
Carmen, by Wildidle; dam, Nettie Brown	W. L. Appleby	Santa Clara.
Sid, unknown	F. M. Denio	Vallejo.
St. Patrick, by Hubbard; dam, by Monday	D. McGovern	Petaluma.
Nabeau, by Nathan Coombs; dam, Beauty	Wm. Boots	Milpitas.
Sidon, by Nathan Coombs; dam, Gypsy	Wm. Boots	Milpitas.
Notidle, by Wildidle; dam, Bonanza	M. F. Tarpey	San Francisco.
Laura Gardner, by Jim Brown; dam, Avail	W. L. Appleby	Santa Clara.

SUMMARY.

Laura Gardner	1
Welcome	2
Notidle	3

Time—2:09½.

RACE NO. 18—SPECIAL TROTTING AND PACING.

Purse, one thousand dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Arab, by Arthurton	O. A. Hickok	San Francisco.
Goldleaf, by Sidney; dam, Fernleaf	Pleasanton St'k Farm	Pleasanton.

SUMMARY.

Arab.....	2	1	1	1
Goldleaf.....	1	2	2	2

Time—2:15 $\frac{1}{4}$; 2:18; 2:20 $\frac{1}{4}$; 2:20.

RACE No. 19—TROTTING.

Free for all. Purse, one thousand dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Arab.....	O. A. Hickok.....	San Francisco.
Adair.....	J. A. Dustin.....	San Francisco.
Director.....	Pleasanton Stock Farm.....	Pleasanton.
Stamboul.....	L. J. Rose.....	Los Angeles.

Walkover for Arab.

RACE No. 20—TROTTING AND PACING.

For named horses. Purse, eight hundred dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Mount Vernon, by Nutwood.....	J. A. McCloud.....	San Francisco.
Damiana, by Admiral.....	L. E. Clawson.....	San Francisco.
Burton, by Naubuc.....	Gardner Bros.....	Napa.
Perihelion, by Admiral.....	C. David.....	San Francisco.
San Diego, by Victor.....	H. C. Airhart.....	San Diego.

SUMMARY.

San Diego.....	2	1	2	1	1
Mount Vernon.....	1	2	1	2	2
Burton.....	3	3	4	3	4
Perihelion.....	5	5	3	4	3
Damiana.....	4	4	5	5	5

Time—2:22; 2:22 $\frac{1}{2}$; 2:24 $\frac{1}{2}$; 2:24 $\frac{1}{2}$; 2:27.

RACE No. 21—TROTTING.

Special, for horses owned in the district. Purse, two hundred dollars. Mile heats; best three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Mambrino Chief, Jr.	T. Smith.....	Vallejo.
Nellie McPike.....	A. J. McPike.....	Vallejo.
Anti-Coolie.....	D. R. Misner.....	Petaluma.
C H G.....	C. H. Gibbs.....	St. Helena.

SUMMARY.

Mambrino Chief, Jr.....	1	1	1
C H G.....	2	2	2
Nellie McPike.....	3	3	3
Anti-Coolie.....	4	4	dr.

Time—2:41 $\frac{1}{2}$; 2:40 $\frac{1}{2}$; 2:38 $\frac{1}{2}$.

TRANSACTIONS

OF THE

TWENTY-SIXTH DISTRICT AGRICULTURAL ASSOCIATION

For the Year 1888,

Composed of the Counties of Amador and Calaveras.

OFFICERS OF THE ASSOCIATION.

U. S. GREGORY.....	President.
CLOVIS T. LaGRAVE.....	Secretary.
GEO. WOOLSEY.....	Treasurer.

DIRECTORS.

I. N. HOLMAN.....	Wallace.
F. FRATES	Ione.
A. C. SMITH	Plymouth.
B. ISAACS	Ione.
H. A. MESSENGER	Valley Springs.
W. P. PEEK.....	Jackson.
C. GARDELLA	Mokelumne Hill.
U. S. GREGORY	Ione.

REPORT.

IONE, December 31, 1888.

To the honorable the State Board of Agriculture:

GENTLEMEN: The Directors of the Twenty-sixth District Agricultural Association submit this, their report of the transactions of said association, for the year ending this date.

CLOVIS T. LAGRAVE,
Secretary.

RECEIPTS AND EXPENDITURES.

Receipts.

Memberships.....	\$280 50	
Season tickets.....	519 00	
Park gate tickets.....	758 00	
Park grand stand.....	204 80	
Pavilion tickets.....	237 40	
Entrance fees.....	1,335 00	
Hack licenses.....	60 00	
Subscriptions.....	527 50	
State appropriation.....	1,200 00	
Privileges.....	1,163 00	
Pools.....	362 75	
Hay sold.....	24 55	
Advertisements.....	18 00	
Wood sold.....	2 50	
Wheelbarrow sold.....	3 00	
		<u>\$6,696 00</u>

Expenditures.

Improvements.....	\$2,406 18	
Miscellaneous fair expenses.....	816 00	
Premiums and purses.....	3,935 00	
Premiums and expenses from 1887.....	630 00	
		<u>\$7,787 18</u>

EXHIBITS AT THE FAIR—1888.

LIVE STOCK DEPARTMENT.

Name of Animal.	Owner.	Address.
CLASS I—THOROUGHBRED HORSES.		
Susie Hooker	R. T. McCarty	Copperopolis.
Jack Brady	W. L. Davis	Copperopolis.
CLASS II—GRADED HORSES.		
Counselor	Wm. Kern	Ione.
Ajax	C. F. Bunch	Ione.
Emma	J. C. Dillian	Buena Vista.
Lady Hawkins	W. J. McGee	Jackson.
Nathan Coombs	J. C. Norris	Buena Vista.
Beauty	F. Seguin	Ione.
Alice, suckling colt	G. D. Wirts	Forest Home.
Suckling colt	W. H. Prouty	Ione.
Linnette	C. F. Bunch	Ione.
CLASS III—FAMILIES.		
Queen, and three colts	Fred. Greve	West Point.
CLASS IV—HORSES OF ALL WORK.		
Daisy	J. Clifton	Ione.
Prince	Robert Downey	Ione.
Orphan	W. O. Cutler	Jenny Lind.
Leo	W. O. Cutler	Jenny Lind.
Brigham	S. A. Phillips	Ione.
CLASS V—ROADSTERS.		
Nutwood	W. H. Prouty	Ione.
CLASS VI—BUGGY HORSES.		
Dexter	R. H. Bagley	Ione.
Fanny	C. W. Swain	Ione.
CLASS VII—DRAFT HORSES.		
Peter	D. Denney	Ione.
Idor	S. Burton	Ione.
Star	J. T. Clifton	Ione.
Jumbo	Fred. Greve	West Point.
Paronette	Voorhies & Barney	Drytown.
Pattre	Voorhies & Barney	Drytown.
Utile	Voorhies & Barney	Drytown.
Barney	S. A. Phillips	Drytown.
CLASS X—THOROUGHBRED CATTLE.		
Ida	Geo. Withington	Ione.
Daisy	Geo. Withington	Ione.
CLASS XII—GRADED CATTLE.		
Cow	D. Denney	Ione.
Calf	D. Denney	Ione.
Queen	G. L. Tubbs	Jackson Valley.
Mollie	J. C. Norris	Buena Vista.
Queen	Mrs. S. Seryanovich	Ione.
Mayflower	Mrs. S. Seryanovich	Ione.
Julia S.	Mrs. S. Seryanovich	Ione.

LIVE STOCK DEPARTMENT--Continued.

Name of Animal.	Owner.	Address.
CLASS XV--SWINE.		
Pen of Berkshires	W. H. Prouty	Ione.
CLASS XVI--POULTRY.		
Buff Cochins	J. H. Cunningham	Ione.
Langshans	Eugene Woolsey	Ione.
Bantams	Eugene Woolsey	Ione.
Houdans	N. Johnson	Ione.
Bunties	N. Johnson	Ione.
Leghorns	N. Johnson	Ione.

PREMIUMS AWARDED—1888.

LIVE STOCK DEPARTMENT.

Name of Animal.	Owner.	Address.	Award.
GRADED HORSES.			
Stallion	Wm. Kern	Ione	\$15 00
Mare	W. J. McGee	Jackson	\$10 00
Colt	J. C. Norris	Buena Vista	\$7 50
Filly	F. Sequin	Ione	\$7 50
Colt	G. D. Wirts	Forest Home	\$3 00
FAMILY.			
Mare and three colts	Fred. Greve	West Point	\$15 00
HORSES OF ALL WORK.			
Stallion	W. O. Cutler	Jenny Lind	\$15 00
Stallion	W. O. Cutler	Jenny Lind	\$7 50
ROADSTER.			
Gelding	W. H. Prouty	Ione	\$5 00
BUGGY HORSE.			
Gelding	R. H. Bagley	Ione	\$7 50
DRAFT HORSES.			
Stallion	Voorhies & Barney	Drytown	\$10 00
Stallion	J. T. Clifton	Ione	\$7 50
Stallion	D. Denney	Ione	\$4 00
THOROUGHBRED CATTLE.			
Cow	Geo. Withington	Ione	\$15 00
GRADED CATTLE.			
Calf	D. Denney	Ione	\$5 00
Cow	G. L. Tubbs	Jackson Valley	\$7 50
SWINE.			
Boar	W. H. Prouty	Ione	\$6 00
Sow	W. H. Prouty	Ione	\$6 00
POULTRY.			
Houdans	M. Johnson	Ione	\$2 00
Leghorns	M. Johnson	Ione	\$2 00
Buff Cochins	J. H. Cunningham	Ione	\$2 00
Langshans	Eugene Woolsey	Ione	\$2 00
Bantams	Eugene Woolsey	Ione	\$2 00

AGRICULTURAL DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
Best wheat	Jasper Johnson	Ione	\$3 00
Black barley	C. Simmons	Ione	Sp. men.
Exhibit of flour	B. Isaacs & Bro.	Ione	\$5 00
Best barley	A. Thompson	Jackson Valley	\$3 00
Best tobacco	J. C. Walker	Ione	\$2 50
Tobacco	J. Garibaldi	Amador	Sp. men.
Wheat and oats	H. A. Messenger	Valley Springs	Sp. men.
Green peppers	Jasper Johnson	Ione	\$1 00
Best collection of garden seeds	Jasper Johnson	Ione	\$5 00
Second best potatoes	J. Clifton	Ione	\$2 50
Best Indian corn	A. P. Harmon	Jackson	\$3 00
Best muskmelons	A. Leoni	Ione	\$1 50
Best stock beets	Geo. Withington	Ione	\$2 00
Best sweet corn	Geo. Withington	Ione	\$3 00
Best sweet peas	W. C. Jones	Ione	\$1 50
Best snap beans	W. C. Jones	Ione	\$1 50
Best cabbage	J. W. McMurry	Ione	\$2 50
Best onions	J. W. McMurry	Ione	\$2 50
Best tomatoes	J. W. McMurry	Ione	\$2 50
Largest squash	J. A. Gooding	Ione	\$2 00
Best watermelons	J. Kidd	Ione	\$2 00
Best exhibit of squashes	Geo. H. Dunlap	Ione	\$2 00
Best egg plant	J. Garibaldi	Amador City	\$1 00
Best potatoes	J. Garibaldi	Amador City	\$5 00
Best table carrots	J. Garibaldi	Amador City	\$2 00
Best table beets	J. Garibaldi	Amador City	\$2 00
Best display of garden vegetables	J. Garibaldi	Amador City	\$5 00
Second best display of garden vegetables	D. Denney	Amador City	\$3 00
Best popcorn	J. Cargnari	Camanche	\$2 00
Best cucumbers	J. Garibaldi	Amador City	\$2 00
Best sweet potatoes	J. Northup	Lancha Plana	\$2 00
Largest pumpkin	J. Northup	Lancha Plana	\$2 00
Best cantaloupes	J. Northup	Lancha Plana	\$1 50
Best collection of flowering plants	R. S. Woolsey	Ione	\$5 00
Best collection of foliage plants	R. S. Woolsey	Ione	\$5 00
Second best collection of plants	Geo. H. Dunlap	Ione	\$2 50
Third best collection of plants	Mrs. D. Denney	Ione	\$1 50
Best cut flowers	Geo. H. Dunlap	Ione	\$1 50
Best lard	J. W. Violet	Ione	\$3 00
Best butter	J. Northup	Lancha Plana	\$3 00
Best wheat bread	Clara Barnhisel	Oleta	\$2 00
Second best wheat bread	Glenn Walker	Ione	\$1 00
Best raised biscuit	Mrs. J. W. Violet	Ione	\$1 00

HORTICULTURAL DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
Best blackberries	Jasper Johnson	Ione	\$1 00
Second best pears	A. Leoni	Ione	\$6 00
Best peaches	J. A. Gooding	Lancha Plana	\$7 50
Second best figs	J. A. Gooding	Lancha Plana	\$2 00
Best plums	E. Merkel	Ione	\$7 50
Best pears	E. Merkel	Ione	\$7 50
Best exhibit of mountain fruit	J. Garibaldi	Amador	\$15 00
Best figs	G. H. Dunlap	Ione	\$3 00
Best pomegranates	J. Northup	Lancha Plana	\$3 00
Second best table grapes	J. Northup	Lancha Plana	\$3 00
Best strawberries	J. Northup	Lancha Plana	\$1 00
Best nectarines	J. Northup	Lancha Plana	\$2 50
Second best apples	A. P. Harmon	Jackson	\$6 00
Best apples	W. H. Prouty	Ione	\$7 50
Clingstone peaches	Thos. Crafts	Ione	Sp. men.

HORTICULTURAL DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Best table grapes	W. C. Jones	Ione	\$5 00
Best prunes	Geo. Woolsey	Ione	\$7 50
Best display of valley fruits	Geo. Woolsey	Ione	\$15 00
Second best plums	J. W. Violet	Ione	\$6 00
Best wine grapes	W. G. Edgar	Jackson Valley	\$5 00
Second best peaches	C. S. Black	Ione	\$6 00
Second best prunes	J. C. Walker	Ione	\$4 50
Best display of table grapes	B. Fischer	Lancha Plana	\$5 00
Best oranges	J. Northup	Lancha Plana	\$5 00
Best display of wine grapes	A. Caminetti	Jackson	Diploma.
Nuts	Thos. Clifton	Ione	\$1 50
Best machine-dried peaches	Geo. Woolsey	Ione	\$3 00
Best machine-dried prunes	Geo. Woolsey	Ione	\$3 00
Largest display of dried fruits	Geo. Woolsey	Ione	\$5 00
Best machine-dried apples	E. Ginocchio & Bro.	Jackson	\$3 00
Second best machine-dried prunes	E. Ginocchio & Bro.	Jackson	\$2 00
Best machine-dried raisins	E. Ginocchio & Bro.	Jackson	\$3 00
Second best machine-dried apples	J. W. Violet	Ione	\$2 00
Best machine-dried pears	J. W. Violet	Ione	\$3 00
Best sun-dried raisins	W. G. Edgar	Jackson Valley	\$3 00
Second best sun-dried peaches	D. Denney	Ione	\$2 00
Best black walnuts	Mrs. D. Dawson	Ione	\$1 50
Best almonds	J. A. Gooding	Lancha Plana	\$1 50
Best peanuts	W. H. Prouty	Ione	\$1 00
Best honey	A. P. Harmon	Jackson	\$2 00
Second best fruit in glass	Mrs. G. Withington	Ione	\$2 00
Best fruit in glass	Geo. Woolsey	Ione	\$3 00
Best preserves in glass	Geo. Woolsey	Ione	\$3 00
Best jellies in glass	Mrs. J. W. Violet	Ione	\$3 00
Second best jellies in glass	Mrs. D. Denney	Ione	\$2 00
Second best preserves in glass	W. H. Prouty	Ione	\$2 00
Best dry wine	Geo. Woolsey	Ione	\$3 00
Best apple cider	Geo. Woolsey	Ione	\$2 00
Best sweet wine	W. G. Edgar	Jackson Valley	\$3 00
Best claret	W. G. Edgar	Ione	\$3 00
Best beer	Jos. Hirschle	Ione	Dip., \$3.

NEEDLE AND FANCY WORK DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
Silk crazy quilt	Mrs. Geo. Dunlap	Ione	Sp. men.
Best lambrequin	Mrs. A. Finn	Plymouth	\$1 50
Best pincushion	Mrs. A. Finn	Plymouth	\$1 00
Quilt	Mrs. H. Martin	Ione	\$2 00
Best fire screen	Mrs. R. H. Bagley	Ione	\$2 50
Best infants' clothing	Mrs. C. Zhender	Volcano	\$2 50
Best fine lace work	Mrs. C. Zhender	Volcano	\$2 00
Best embroidered table scarf	Mrs. J. F. Stewart	Ione	\$2 50
Fine lace work	Mrs. N. Johnston	Ione	\$1 00
House rug	Mrs. N. Johnston	Ione	\$0 75
Album quilt	Mrs. G. Withington	Ione	Sp. men.
Best display of quilts	Mrs. D. Dawson	Ione	\$2 50
Best silk embroidery	Mrs. M. C. Rendell	Ione	\$2 50
Outline embroidery	Mrs. M. C. Rendell	Ione	Sp. men.
Patchwork quilt	Mrs. M. C. Rendell	Ione	\$1 00
Best chenille work	Mrs. Southerland	Ione	\$2 00
Best carriage afghan	Mrs. Southerland	Ione	\$2 50
Best embroidered banner	Mrs. Southerland	Ione	\$2 50
Best handkerchief case	Mrs. C. T. LaGrave	Ione	\$1 50
Handsomest ornamental plaques	Mrs. C. T. LaGrave	Ione	\$2 50
Best crochet bedspread	O. W. Rhinehart	Pine Grove	\$2 50
Silk crazy quilt	Mrs. O. T. Wilson	Ione	Sp. men.
Best crochet skirts	Mrs. J. Marchant	Ione	\$2 50
Best macrame work	Miss M. E. Schrack	Mokelumne Hill	\$1 50

NEEDLE AND FANCY WORK DEPARTMENT—Continued.

Article Exhibited.	Exhibitor.	Address.	Award.
Crochet and knit lace work	Mrs. M. L. Earle	Lancha Plana	Sp. men.
Patchwork quilt	Mrs. J. W. Violet	Ione	Sp. men.
Best silk crazy quilt	Mrs. E. Evans	Jackson	\$3 00
Best arrasene footstool	Mrs. J. Hewitt	Jackson	\$1 50
Handsome sofa cushion	Mrs. J. Hewitt	Jackson	\$1 50
Handsome tidies	Miss L. McHardy	Ione	\$1 50
Best outline embroidery	Miss L. McHardy	Ione	\$1 50
Best sofa cushion	Miss L. McHardy	Ione	\$0 75
Best darned net work	Mrs. C. T. LaGrave	Ione	\$2 00
Best knit wool baby socks	Mrs. J. Maestretti	Ione	\$1 50
Patchwork quilt	Mrs. D. Denney	Ione	\$2 00
Best crewel work	Mrs. M. T. White	Ione	\$1 00
Best arrasene embroidery	Mrs. M. T. White	Ione	\$1 50
Best house rug	Rev. M. T. White	Ione	\$1 00
Best arrasene footstool	Mrs. C. Hofman	Jackson	\$1 00
Best hand-made hose	Mrs. B. S. Sanborn	Jackson	\$1 50
Crochet skirt	Mrs. I. N. Harlan	Ione	\$2 50
Lamp mat	Mrs. I. N. Harlan	Ione	\$1 00
Best knitted bedspread	Mrs. A. Yoak	Jackson	\$2 50
Handsome pillow shams	Mrs. E. Evans	Jackson	\$2 50
Hair work	Mrs. M. T. White	Ione	\$1 50
Macrame lambrequin	Mrs. I. N. Harlan	Ione	\$1 50
Best paper flowers	Miss A. Dwyer	Jackson	\$1 50
Campo display	Mrs. O. T. Wilson	Ione	\$1 50
Best display of fancy work	Mrs. O. T. Wilson	Ione	\$5 00
Knitted bedspread	Mrs. Seryanovich	Ione	\$1 50
JUVENILE.			
Best fine lace	Lucy Johnston	Ione	\$1 50
Best embroidered pincushion	Aggie Stewart	Ione	\$0 50
Best handkerchief	Mamie Ringer	Buena Vista	\$1 50
Best cotton embroidery	Aida Ringer	Buena Vista	\$1 50
Best patchwork quilt	Clara Barnhisel	Oleta	\$1 50
Best knit tidy	Mamie Tierney	Ione	\$0 50

FINE ART DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
Best oil painting (still life)	Dr. O. T. Wilson	Ione	\$5 00
Best oil painting (landscape)	Dr. O. T. Wilson	Ione	\$5 00
Best collection	Dr. O. T. Wilson	Ione	\$5 00
Best landscape painting	Miss Cora Love	Ione	Sp. men.
Second best landscape painting	Miss E. Woolsey	Ione	\$2 50
Best flower painting	Mrs. C. T. LaGrave	Ione	\$2 50
Best painting on textile fabrics	Mrs. C. T. LaGrave	Ione	\$2 50
Best collection	Mrs. C. T. LaGrave	Ione	\$5 00
Best crayon drawing	Miss E. I. Putnam	Ione	\$1 50
Best pen drawing	C. W. Swain	Ione	\$1 50
Best pencil drawing	Miss C. Love	Ione	\$1 50
Best kensington painting	Mrs. J. F. Scott	Ione	\$2 00
Best plaque oil painting	Miss Ivy Mace	Jackson	\$2 00
Best oil painting	Miss Ivy Mace	Jackson	\$2 50
Best collection of photographs	C. Sutterly	Ione	Dip., \$5 00

MECHANICAL AND MISCELLANEOUS DEPARTMENT.

Article Exhibited.	Exhibitor.	Address.	Award.
Best artificial dentures	Dr. O. T. Wilson ..	Ione	Dip., \$3 00
Best soapstone	A. P. Harmon	Jackson	\$1 50
Best hard soap	J. Northup	Lancha Plana	\$1 00
Best soft soap	J. Northup	Lancha Plana	\$2 00
Best exhibit of pottery	Fred. Hammer	Ione	\$7 50
Best exhibit of firebrick	Fred. Hammer	Ione	\$3 00
Best table cutlery	Geo. Woolsey	Ione	\$2 50
Best pocket cutlery	Geo. Woolsey	Ione	\$2 50
Best silverware	Geo. Woolsey	Ione	Dip., \$1 00
Best buckskin gloves	W. G. Edgar	Jackson Valley	\$3 00
Best display of raw silk	J. A. Garibaldi	Jackson	\$5 00

SPEED PROGRAMME.

TUESDAY, AUGUST 7, 1888.

RACE No. 1—RUNNING.

For district saddle horses. Ten dollars for starters. Fifty dollars added. Six hundred yards and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Gallagher.....	C. F. Bunch.....	Ione.
Copper Cent.....	M. Heffren.....	Ione.
Parnell.....	D. Scully.....	Ione.
Tenbroeck.....	S. Sumate.....	Stockton.
Little Rube.....	Nuner & Berry.....	Valley Springs.
Major.....	J. I. Minear.....	Jackson.

SUMMARY.

Copper Cent.....	1
Little Rube.....	2
Tenbroeck.....	3

Time—0:34½; 0:33¾.

RACE No. 2—RUNNING.

For district horses. Twenty dollars entrance; one half forfeit. One hundred and fifty dollars added; of which, fifty dollars to second horse; third to save stake. One half mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Barney G.....	U. S. Gregory.....	Ione.
Painkiller.....	G. L. Richardson.....	Latrobe.
Norton.....	E. Flitner.....	Sacramento.
Bodie.....	A. C. Smith.....	Plymouth.
Jack Brady.....	W. L. Davis.....	Copperopolis.
Susie.....	R. T. McCarty.....	Copperopolis.

SUMMARY.

Susie.....	1
Jack Brady.....	2
Painkiller.....	3

Time—0:49.

RACE NO. 3—TROTTING AND PACING.

Free for all trotters and pacers without record up to date entries close. Purse, three hundred dollars.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Ontario	A. Tietjens	Sacramento.
Ross S	W. Ober	Sacramento.
Little Doc	F. Seguin	Ione.
Johnny Skelton	T. D. White	Sacramento.

SUMMARY.

Ontario	1
Ross S	2
Little Doc	3

Time—2:29 $\frac{1}{2}$; 2:31; 2:29 $\frac{1}{2}$; 2:32.

RACE NO. 4—RUNNING.

For all ages. Twenty-five dollars entrance; ten dollars forfeit. Two hundred dollars added; of which, fifty dollars to second horse; third to save stake. One half mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Lida Ferguson	H. Willits	Willits.
Minnie R	E. Flitner	Latrobe.
Peregrine	W. M. Murry	Sacramento.
Blue Bonnet	D. Dennison	Sacramento.

SUMMARY.

Lida Ferguson	1
Peregrine	2
Minnie R	3

Time—0:48; 0:48 $\frac{3}{4}$.

RACE NO. 5—TROTTING.

2:27 Class. Purse, four hundred dollars.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Ha Ha	Houser & Soule	Stockton.
Eva W	George Cropsy	Pleasanton.
Ed	A. T. Jackson	Stockton.

SUMMARY.

Ha Ha	1
Eva W	2
Ed	3

Time—2:28 $\frac{3}{4}$; 2:30 $\frac{3}{4}$; 2:29 $\frac{1}{2}$; 2:32 $\frac{1}{2}$.

SPECIAL RACE—RUNNING.

Purse, one hundred dollars. Five eighths of a mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Maggie D	D. Dennison	 Sacramento.
Menlo	E. Flintner	 Latrobe.
Plato	A. Harrison	 Stockton.
Minnie B	H. E. Barton	 Latrobe.
Avondale	A. Y. Stephenson	Boise City, Idaho.

SUMMARY.

Minnie B	1
Maggie D	2
Menlo	3

Time—1:03 $\frac{3}{4}$; 1:04 $\frac{1}{4}$.

SPECIAL RACE—TROTTING.

3:00 Class. For named horses. Purse, one hundred dollars. Mile heats; best two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Ajax	C. F. Bunch	 Ione.
Harry Gear	A. T. Jackson	 Stockton.
Hiram Wilkes	F. Post	 Stockton.
Switchoff	W. Ober	 Sacramento.

SUMMARY.

Switchoff	1
Ajax	2
Hiram Wilkes	3

Time—3:11; 3:07; 3:08.

RACE No. 6—RUNNING.

For all ages. Twenty-five dollars entrance; ten dollars forfeit; two hundred dollars added, of which fifty dollars to second horse; third to save stake. One mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Hermes	L. A. Blasingame	 Fresno.
Phantom	H. Howard	 Stockton.
Dave Douglas	D. Dennison	 Sacramento.
Cito	H. Willits	 Willits.
Susie S	A. Y. Stephenson	Boise City, Idaho.
Etta W	A. Wakeman	 Sacramento.

SUMMARY.

Susie S	1
Dave Douglas	2
Hermes	3

Time—1:43 $\frac{3}{4}$; 1:43 $\frac{3}{4}$; 1:45.

RACE No. 9—RUNNING.

Handicap. For district horses. Fifteen dollars entrance. One half forfeit. One hundred and fifty dollars added, of which fifty dollars to second horse; third to save stake. Six hundred yards dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Lucy Penry.....	A. C. Smith.....	Plymouth.
Norton.....	E. Flitner.....	El Dorado Co.
Susie Hooker.....	R. T. McCarty.....	Copperopolis.
Barney G.....	U. S. Gregory.....	Ione.
Painkiller.....	H. E. Barton.....	Latrobe.

SUMMARY.

Susie Hooker.....	1
Painkiller.....	2
Barney G.....	3

Time—0:32.

RACE No. 8—RUNNING.

For all ages. Twenty dollars entrance; ten dollars forfeit. One hundred and fifty dollars added, of which fifty dollars to second horse; third to save stake. Three quarters of a mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Blue Bonnet.....	D. Dennison.....	Sacramento.
Pickpocket.....	M. D. Garney.....	Stockton.
Peregrine.....	W. M. Murry.....	Sacramento.
Annie B.....	Nuner & Berry.....	Valley Springs.

SUMMARY.

Peregrine.....	1
Blue Bonnet.....	2
Pickpocket.....	3

Time—1:16; 1:16.

SPECIAL TROTTING RACE.

2:40 Class. Purse, four hundred dollars.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Ross S.....	R. C. Sargent.....	Stockton.
Steve Whipple.....	W. H. Parker.....	Stockton.
The Dude.....	J. R. Hodson.....	Sacramento.

SUMMARY.

Ross S.....	1
Steve Whipple.....	2
The Dude.....	3

Time—2:32; 2:29 $\frac{1}{4}$; 2:30.

SPECIAL TROTTING RACE.

For yearlings. Half mile heats; two in three.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Linnette	C. F. Bunch	Ione.
Cherokee Prince	A. T. Jackson	Stockton.

SUMMARY.

Linnette	1
Cherokee Prince	2

Time—2:23; 2:12.

SPECIAL RUNNING PURSE.

Purse, one hundred dollars. Five eighths of a mile dash.

Name and Pedigree of Horse.	By Whom Entered.	Address.
J M R	W. M. Murry	Sacramento.
Minnie R	E. Flitner	El Dorado Co.
Blue Bonnet	D. Dennison	Sacramento.
Susie Hooker	R. T. McCarty	Copperopolis.

SUMMARY.

J M R	1
Minnie R	2
Blue Bonnet	3

Time—1:02½.

NOVELTY RACE.

Purse, one hundred dollars; twenty-five dollars to each quarter. One mile.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Painkiller	H. E. Barton	Latrobe.
Little Rube	Nuner & Berry	Valley Springs.
Maggie D	D. Dennison	Sacramento.
Menlo	M. McCrimmons	Sacramento.

Painkiller won first, second, and third quarters, and mile. Time of mile—1:47.

SPECIAL TROTTING AND PACING RACE.

Purse, one hundred dollars. Mile heats; three in five.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Ontario	A. Tietjens	Sacramento.
Little Doc	F. Seguin	Ione.
Johnny Skelton	J. R. Hodson	Sacramento.

SUMMARY.

Ontario	1
Johnny Skelton	2
Little Doc	3

Time—2:29½; 2:32; 2:33; 2:35½.

MATCH RACE.

One quarter mile and repeat.

Name and Pedigree of Horse.	By Whom Entered.	Address.
Gallagher	C. F. Bunch	Ione.
Major	W. C. Minear	Jackson.
Daisy L	R. S. Love	Ione.

SUMMARY.

Gallagher	1
Major	2
Daisy L	3

Time—0:23½; 0:23¼; 0:23¼.

CONTENTS.

	PAGE.
Address, Opening—Hon. George A. Knight.....	199
Address, Annual—Hon. John P. Irish.....	201
Alfalfa as a Horse Feed.....	149
A Winter Fair.....	206
Agricultural Districts of the State.....	10
An Act to provide for the management of the State Agricultural Society by the State.....	3
An Act to form Agricultural Districts, etc.....	7
An Act amendatory of an Act to form Agricultural Districts.....	9
Agricultural Districts.....	12
Annual Meeting of the State Board of Agriculture.....	37
Constitution of the State Agricultural Society.....	5
Dried Fruits—Fourteenth Annual Review—G. W. Meade & Co.....	219
Exhibits at the Fair—	
First Department—Live Stock.....	39
Second Department—Machinery, Engines, etc.....	73
Third Department—Textile Fabrics.....	77
Juvenile Department.....	82
Fourth Department—Mechanical Products.....	83
Fifth Department—Agricultural Products.....	88
Sixth Department—Fruits, etc.....	92
Seventh Department—Fine Arts.....	99
Eighth Department—County Exhibits.....	101
Ninth Department—Miscellaneous.....	101
Financial Statement.....	26
Meteorology and Climatology of California, including Rainfall, Temperature, and General Weather Statistics—Barwick.....	243
Oroville Citrus Fair.....	206
Park and Pavilion Receipts.....	36
Profit and Loss Account.....	36
Premiums Awarded—	
First Department—Live Stock.....	107
Second Department—Machinery, Engines, etc.....	121
Third Department—Textile Fabrics.....	124
Fourth Department—Mechanical Products.....	127
Fifth Department—Agricultural Products.....	131
Sixth Department—Fruits, etc.....	134
Seventh Department—Fine Arts.....	137
Eighth Department—County Exhibits.....	140
Ninth Department—Miscellaneous.....	140
Gold Medals.....	143
Report of State Board of Agriculture.....	13
Report of Races—"Breeder and Sportsman".....	179
Report of Cattle Diseases—Thomas Bowhill, M.R.C.V.S.....	228
Report of District Agricultural Association No. 1.....	427
Report of District Agricultural Association No. 2.....	447

	PAGE.
Report of District Agricultural Association No. 3	517
Report of District Agricultural Association No. 4	537
Report of District Agricultural Association No. 5	573
Report of District Agricultural Association No. 6	593
Report of District Agricultural Association No. 7	619
Report of District Agricultural Association No. 8	637
Report of District Agricultural Association No. 9	649
Report of District Agricultural Association No. 10	671
Report of District Agricultural Association No. 11	684
Report of District Agricultural Association No. 12	706
Report of District Agricultural Association No. 13	721
Report of District Agricultural Association No. 14	737
Report of District Agricultural Association No. 16	747
Report of District Agricultural Association No. 17	769
Report of District Agricultural Association No. 18	787
Report of District Agricultural Association No. 19	805
Report of District Agricultural Association No. 21	821
Report of District Agricultural Association No. 25	835
Report of District Agricultural Association No. 26	855
San Francisco "Journal of Commerce," Special Display of Exhibits.....	144
Speed Programme, Official	159
Standing Committees	38
The Profitable Olive.....	148
The Raisin Industry.....	150
Wheat, Flour, Barley, etc.	235

